An evaluation of the implications of the revised HIV deployment policy on the healthcare service of the South African National Defence Force

by

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Declaration

By submitting this thesis electronically, I declare that the entirety of the work contained therein is my own, original work, that I am the sole author thereof (safe to the extent explicitly otherwise stated), that reproduction and publication thereof by Stellenbosch University will not infringe any third party rights and that I have not previously in its entirety or in part submitted it for obtaining any qualification.

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Abstract

The South African National Defence Force (SANDF) implemented a new HIV/AIDS deployment policy after the verdict in the court case between the SANDF and the labour unions. In terms of the verdict, the court held that the older HIV deployment policy was discriminating against HIV-infected members, because they were not being deployed externally. The implementation of the latter came with challenges at the mission areas, which was the rationale for this study.

The study was conducted among healthcare workers who are employed by the South African Military Healthcare Service (SAMHS), which is one of the four arms of service of the SANDF. The healthcare workers are the custodians of the healthcare of the SANDF members and their families, retired members and their families, and military veteran members. These SANDF members, taken care of by healthcare workers of SAMHS, include even those who are infected with HIV/AIDS.

Once the new healthcare policy took effect in 2009, the SANDF started to deploy HIV-infected members on the external missions. The part of the HIV deployment policy that was concentrated on the most is as follows: “Prepared and supported military health capabilities, services and facilities to support members with health classification restrictions are in place, where reasonable and possible” (DODD, 2009:2 9d).

These HIV deployment policy changes had some impact on the daily healthcare rendering in the mission areas. The healthcare workers experienced some challenges which the SANDF has to review. These challenges include the procurement and issuing of medication to infected members and the lack of clear guidelines about monitoring their progress or deterioration.

This qualitative study used non-probability sampling, with purposive sampling of the healthcare workers of the SAMHS. Healthcare workers were given questionnaires in order to identify the challenges and what may be the contributing factors to these challenges. The researcher also received some suggestions on how to solve these challenges in the mission areas. The completed questionnaires were returned by secured Department of Defence (DOD) email and personal fax of the researcher.

The participants of this study also suggested questions for the questionnaire, which they saw was not covered by the questionnaire. The nursing discipline is the one that contributed the

most to this research. The healthcare workers are well informed about the HIV deployment policy. There were no clear guidelines for healthcare workers prior to the deployment of monitoring HIV-infected members and issuing medication to members deploying for twelve months. They mentioned that demand for medication in the mission areas increased since the implementation of the new HIV deployment policy.

The SANDF has to include health care workers on the implementation of policies. Clear guidelines have to be given to healthcare workers prior to deployment. The is still an opportunity of conducting more researches about the HIV deployment policy including research about the infected members The other disciplines have to be included, including the Office of the Directorate of HIV/AIDS. Another recommendation on the future researches on the HIV deployment policy is including the researcher as a participant observer on the deployment missions.

Opsomming

Die Suid-Afrikaanse Nasionale Weermag (SANW) het die nuwe MIV/VIGS-ontplooiingsbeleid geïmplementeer ná die hofsaak tussen die SANW en die vakbonde. Ingevolge die uitspraak het die hof bevind dat die ouer MIV/VIGS-ontplooiingsbeleid teen MIV-geïnfekteerde lede diskrimineer omdat hulle nie ekstern ontplooi is nie. Die implementering van laasgenoemde het met uitdagings by missiegebiede gekom wat die rede vir hierdie studie was.

Die studie is onder gesondheidswerkers wat in diens is van die Suid-Afrikaanse Militere Gesondheidsorgdiens (SAMGD), wat een van die vier arms van die SANW is, gedoen. Die gesondheidswerkers is die bewaarders van die gesondheidsorg van die SANW-lede en hul gesinne, afgetrede lede en hul gesinne, en militere veteraanlede. Hierdie SANW-lede wat deur gesondheidswerkers van SAMHS versorg word, sluit selfs diegene wat met MIV/VIGS geïnfekteer is, in.

Toe die nuwe gesondheidssorgbeleid in 2009 van krag geword het, het die SANW se MIV-geïnfekteerde lede op die eksterne sendings begin ontplooi. Die deel van die MIV-ontplooiingsbeleid wat op die meeste gekonsentreer is, is soos volg: “Voorbereide en ondersteunde militere gesondheidsvermoëns, -dienste en -fasiliteite om lede te ondersteun met gesondheidsinskrywingsbeperkings is in plek, waar redelik en moontlik” (DODD, 2009:29d).

Hierdie veranderinge in die implementering van die MIV-beleid het ’n uitwerking gehad op die daaglikse gesondheidsdiensverskaffers in die missie-gebiede. Die gesondheidswerkers het ’n paar uitdagings ondervind wat die SANW moet hersien. Hierdie uitdagings sluit in die verkryging en uitreiking van medikasie aan geïnfekteerde lede en die gebrek aan duidelike riglyne oor die monitering van hul vordering of agteruitgang.

Hierdie kwalitatiewe studie het nie- waarskynlikheidstreekproefneming gebruik, met doelgerigte steekproefneming van die gesondheidswerkers van die SAMGD. Gesondheidsorgwerkers is vraelyste gegee en ’n aantal onderhoude is gevoer om die uitdagings en wat die bydraende faktore vir hierdie uitdagings kan wees te identifiseer. Die navorser het ook voorstelle ontvang oor hoe om hierdie uitdagings in die missie-gebiede op te los. Die voltooide vraelyste is terugbesorg deur ’n veilige Departement van Verdediging-e-pos en persoonlike faks van die navorser.

Die deelnemers aan hierdie studie het ook inligting bygevoeg wat hulle gesien het nie deur die vraelys gedek is nie. Die verpleegdissipline is die een wat die meeste bygedra het tot hierdie navorsing. Die gesondheidswerkers is goed ingelig oor die MIV-ontplooiingsbeleid. Daar is geen duidelike riglyne vir gesondheidswerkers voor die ontplooiing van MIV-geïnfekteerde lede se monitering en uitreiking van medikasie aan lede wat vir twaalf maande ontplooi word nie. Hulle het genoem dat die vraag na medikasie in die ontplooiingsgebiede toegeneem het sedert die implementering van die nuwe MIV-ontplooiingsbeleid.

Die SANW moet gesondheidswerkers insluit oor die implementering van die beleid. Duidelike riglyne moet aan die gesondheidswerkers voor implementering gegee word. Daar word aanbeveel dat meer navorsing gedoen word, insluitend navorsing oor die begunstigdes van hierdie ontplooiingsbeleid. Die ander disciplines moet ingesluit word, insluitend die Kantoor van die Direksie van MIV/VIGS. ’n Ander aanbeveling is dat toekomstige navorsing die navorser as deelnemende waarnemer op die ontplooiing moet gebruik.

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Abbreviations

1 Mil Hosp. – 1 Military Hospital (in Pretoria)

2 Mil Hosp. – 2 Military Hospital (in Cape Town)

3 Mil Hosp. – 3 Military Hospital (in Bloemfontein)

AIDS – Acquired Immune Deficiency Syndrome

ALT – Alanine transaminase

AMHF – Area Military Health Formation

AMHU – Area Military Health Unit

AMHU EC – Area Military Health Unit Eastern Cape

AMHU FS – Area Military Health Unit Free State

AMHU GP – Area Military Health Unit Gauteng

AMHU KZN – Area Military Health Unit KwaZulu-Natal

AMHU LP – Area Military Health Unit Limpopo

AMHU MP – Area Military Health Unit Mpumalanga

AMHU NC – Area Military Health Unit Northern Cape

AMHU NW – Area Military Health Unit North West

AMHU WC – Area Military Health Unit Western Cape

ART – Antiretroviral therapy

ARV – Antiretroviral drugs

C130 – The cargo plane of the South African Air Force.

CD4 T – lymphocyte cell-bearing CD4 receptor

CIC – Commander in chief

Code of Conduct – Code of Conduct for uniformed members of the South African National Defence Force.

DI – Defence Intelligence

Dir. HIV/AIDS – Directorate HIV/AIDS

Dir. Med – Directorate Medicine

Dir. Nurs. – Directorate Nursing

Dir. Oral Health – Directorate Oral Health

Dir. Pharm. – Directorate Pharmacy

Dir. Psych. – Directorate Psychology

Dir. Soc. Work – Directorate Social Work

DOD – Department of Defence

DOD Mob Centre – Department of Defence Mobilisation Centre

DOD Mob Centre Bloem. – Department of Defence Mobilisation Centre Bloemfontein.

DoH – Department of Health

EGFR – Estimated glomerular filtration rate

ELISA – Enzyme-linked immunosorbent assay

HCP – Healthcare practitioner

HIV – Human immunodeficiency virus

NAM – Nursing area manager

NOIC – Nursing officer in charge

OI – Opportunistic infection

PHC – Primary healthcare

SAMHS – South African Military Health Service

SANAC – South African National AIDS Council

SANDF – South African National Defence Force

SG – Surgeon general

SO1 – Staff officer

SO1 Med. – Staff officer (Medical)

SO1 Occup. – Staff officer (Occupational Health)

SO1 Prevent. – Staff officer (Preventative Health)

SO1 Psych. – Staff officer (Psychology)

SO1 Soc.Worker – Staff officer (Social worker)

SO1Nurs. – Staff officer (Nursing)

SSO – Senior staff officer

TB – Tuberculosis

VL – Viral load (HIV)

Waterkloof Air Force Base – Department of Defence airport in Pretoria

WHO – World Health Organization

Chapter1: Introduction and Research Question

1 Introduction

This chapter provided an overview of the background and rationale of the study. It further conveyed the aim, research statement, research question, research objective, research design and methodology of the study. Finally, the chapter provided an outline of the thesis.

1.1 Title of the Study

The title of this study is as follows: An evaluation of the implications of the revised HIV deployment policy on the healthcare service of the South African National Defence Force

1.2 Background and Rationale of the Study

The South African National Defence Force (SANDF) implemented a policy of deploying human immunodeficiency virus-positive (HIV-positive) members to external missions. The policy was implemented after several SANDF members and the labour unions took the SANDF to High Court for their discriminatory policy toward soldiers living with HIV/AIDS (DOD, 2009; Heinecken and Nel, 2009:341, 345; *Mail and Guardian*, 2008; De Waal, 2009:23; South African National Defence Union vs. Minister of Defence, Secretary of Defence, Chief of the South African National Defence Force, P. Moloto, Acting Chairperson Military Bargaining Council [2007]; Andisiwe Dwenga, Applicant X, Motoai Shadrack Sebatana, South African Security Forces Union, South African National Defence Union vs. Surgeon General of the South African Military Health Service, Chief of the South African Navy, Chief of the South African National Defence Force, Minister of Defence, President of the Republic of South Africa [2013:3]; AC, 40844.). The High Court gave a judgment that the policy was unconstitutional (*Mail and Guardian*, 2008; DOD, 2009; Heinecken and Nel, 2009:345; De Waal, 2009:23). All government policies or programmes should be monitored and evaluated in order to determine their impact on the population for whom they were initially intended (Cloete, Rabie and De Coning, 2014:2; Babbie and Mouton, 2015:337).

The SANDF's argument was that the environment of deployment requires an individual who is mentally, physically and psychologically fit (DOD, 2001: B-1). The unions claimed that the SANDF's argument was not based on any verified medical research (Heinecken and Nel, 2009:343). The policy at the time did not allow HIV-positive soldiers to be deployed outside

the country, regardless of the stage of the disease, CD4 and/or viral load (DOD, 2001; DOD; 2009; Heinecken and Nel, 2009:341).

1.3 The Aim of the Study

The aim of the study was to evaluate the implication of the revised HIV policy on the obligation of the SANDF towards the infected individual since the period of the implementation of the new HIV deployment policy. Babbie and Mouton (2015:335) noted that a programme evaluation of the scientific methods that are being used to measure the implementation and outcome of the programme is necessary. In this study, the implementation of the policy by the SANDF was evaluated. Programme evaluation is done for improvement and refinement, financial accountability, quality assurance and control and on public demand (Babbie and Mouton, 2015:337). The evaluation conducted in this study is for academic purposes, but the researcher believes that a consultation process is the lacking component in the SANDF as organisation, especially consultation with the members that are involved on the ground.

This obligation pertained to healthcare provision on those HIV-positive members in the mission areas. The auditable outcomes of the policy concentrate on the following statement: "Prepared and supported military health capabilities, services and facilities to support members with health classification restrictions are in place, where reasonable and possible" (DOD, 2009:2 9d).

Luyirika (2003:6) mentioned that other writers explained that at times policy experiences difficulties such as hindrances or interference with the implementation of the policy, a lack of administration control, the nature of the policy itself, the clarity of the policy's goals, and communication of the policy to stakeholders. The researcher believes that in the case of the SANDF, the lowest healthcare worker that will be involved in caring for the HIV-infected deployed members could measure what would interfere with the implementation of the policy in terms of the organisation's duties, experience of political pressure and court pressure, and clarity of goals and communication.

Furthermore, Luyirika (2003:7) explained that policy implementation should include the needs of the beneficiaries and interest groups that were not consulted during formulation of that particular policy. In this HIV deployment policy, the HIV-infected members, healthcare workers and foreign forces with whom SANDF was deployed at the time, had to be considered.

1.4 The Research Problem

The SANDF started to deploy HIV-positive members externally since 2009. The new HIV deployment policy was a great decision in terms of human rights, as stipulated in the constitution of the country: "The state may not unfairly discriminate directly or indirectly against anyone on one or more grounds including race, gender […], language and birth" (The Constitution of the Republic of South Africa, ch2 s.9 ss.3, 1996) (The Constitution).

The SANDF still had obligations towards each and every member that is deployed outside the country. These obligations, among others, included a safe environment, provision of basic needs, provision of healthcare and allowances. The policy of deploying HIV-positive members in the SANDF was implemented. Hence there was continuous constant complaints and challenges observed by the researcher on healthcare provision, such as medication issuing at the deployment areas, monitoring of the patients on treatment for adherence, monitoring of those infected members that are not on treatment and even the guidelines that healthcare workers had to follow in caring for infected members (medication issuing, stock and storage; and blood investigations). Which factors are contributing to the challenges that are faced by health care workers concerning the caring of HIV infected members at the external deployment areas. In addition challenges have been exasperated by the secondary decision of extended deployments for up to one year. This decision of deploying HIV-positive members for more than six months has implications for HIV and other chronic illnesses. However, the latter do not have the same risk as HIV and they were not the cause of the policy change. Evaluation of the changed policy on healthcare provision toward the HIV-infected deployed individuals by the SANDF resulting in the necessity of policy implementations. Babbie and Mouton (2015:345) accordingly mentioned that it is of importance to conduct an evaluation of the implemented programme.

The HIV-positive person requires regular follow-up consultations to determine their level of health, compliance and medication effectiveness. The secondary decision of deploying soldiers externally for twelve months, instead of the usual six-month rotations, results in additional challenge to healthcare provision. The members on antiretroviral drugs are supposed to bring their own medication from their units for the duration of the deployment.

As from 2013, the external deployments were extended to 12 months. The deploying members undergo pre-deployment preparation in Port St John for three months prior to the deployment for three to four weeks to Bloemfontein, which is the last area before exiting the country and

deporting for the 12 months deployment outside the country. The duration of the entire deployment can be estimated at about fifteen months or more.

According to the DOD deployment (DODD) policy (2009:3 s10), effectiveness will be measured against the auditable outcomes by 1 July 2015. Therefore, the researcher believes that the study could contribute towards a policy review and can change deployment criteria for HIV-positive deploying members.

1.5 The Research Question

The research question for this study is as follows: What are the implications on healthcare rendering as an obligation toward the deployed HIV-infected soldiers in the SANDF since the implementation of the policy in 2009?

1.6 Hypothesis

- The SANDF HIV deployment policy, which is unclear to the healthcare workers, could be the causing factor of rendering a lower standard of care to HIV-infected members at the external deployments than they should receive.
- The failure to consult with different experts can be the cause of the inability of SANDF as an organisation to render the level of expected healthcare service to its HIV-infected members in the mission areas.

1.7 The Research Objectives

The aim of the study was to evaluate the implications on the organisation's obligation towards rendering healthcare services to HIV-infected members on deployment. The healthcare provision is the SANDF's obligation towards the HIV-infected soldiers in the deployment areas. The aim of this study was to be achieved by considering the following:

1.7.1 The Implications of the HIV Policy on the Organisation (SANDF)

a) Assessing the HIV policy implications for the healthcare service of the organisation as a whole.
b) Assessing the HIV policy implications for the healthcare service rendering at the deployment.
c) Assessing the information about the previous and revised HIV policy of the SANDF that will be obtained via secondary analysis of documents, i.e. through a literature review.

1.7.2 The Implications of the HIV Policy for the Medical Service by SAMHS

a) Assessing the HIV policy implications of the provision of ARVs to those individuals that are on treatment. (Who prescribes, issues and keeps ARVs and where do they keep the treatment?)
b) Assessing the HIV policy in terms of the measures that are in place and how complications are managed in the mission areas.

1.7.3 HIV-positive Patients

a) Assessing how the patients that are on/not on treatment are followed up in the mission area.
b) Assessing the system used for follow-up appointments for the infected individual.
c) Assessing how the policy implemented affects the individual's adherence in taking ARVs.

1.7.4 Secondary Research of Existing Data related to this Study

a) Assessing the old and new SANDF HIV deployment policies.
b) Assessing the existing data about the case that led to the SANDF changing its HIV deployment policy.
c) Assessing the DoH guidelines that guide the healthcare system on HIV/AIDS patients inside the country, which are also applicable on the external missions of the SANDF.

1.8 The Research Design

Research design is a plan or blueprint of how you intend to conduct research (Mouton, 2000:55; Babbie and Mouton, 2015:74). The research design of this study was empirical in nature and utilised hybrid (primary and secondary) data. Wahyuni (2012:77) mentions that primary data is the data that can be collected by the researcher from the participants using certain methods of collecting data, while secondary data is the data that can be obtained from the existing publications on the object of study. The researcher believed that the research would be a formative evaluation of the DOD's HIV deployment policy, although it is done for academic purposes, because the findings can assist the SAMHS in improving the programme. Babbie and Mouton (2015:369) explain that formative evaluation is done to provide feedback to the people who want to improve a programme.

This study was to inherently be an implementation (process) evaluation and the data presentation will be in textual form. Babbie and Mouton (2015:369) explain that programme evaluation is the field of social science that uses all ranges of social science methods in evaluating social intervention programmes. The implementation evaluation of this study was also be of judgment oriented in nature. Judgement-oriented evaluations measure the value and worth of a programme to the intended beneficiary, i.e. whether they benefited from the programme.

The questions for this research would be descriptive in nature and the existing data in terms of the literature, policies and the available information on the intended or scheduled review of the policy will be gathered and used as part of triangulation.

The descriptive type of questions was to bring about more data that will make it easy to understand the effect of the policy on different health disciplines, in order to be able to evaluate the implications on healthcare as obligation. The method that was used for collecting data in this research was the semi- structured questionnaire. Another method, namely analysing existing documents, will also be used.

1.9 The Research Methodology

This research used a qualitative approach as its main methodology. Qualitative research is defined by Babbie and Mouton (2015:646) as when the researcher want to study people's actions from an insiders' perspective. Wahyuni (2012:77) explains that qualitative research seeks to produce credible knowledge of interpretations on organisation and management accounting processes and understandings, with an emphasise more on uniqueness and contexts.

The research was to focus on the constructive effect of improving the healthcare rendering for HIV-positive members who are deployed externally. There were few qualitative studies done on the SANDF HIV deployment policy that are in existence.

This study employed non-probability sampling, which is purposive in nature. Babbie and Mouton (2015:166) explain that it is sometimes important for the researcher to choose a sample based on their knowledge about the intended participants, elements and aim of the research.

This qualitative study was conducted among a specific group of healthcare workers in the SANDF (SAMHS). The number of participants for this study was to be +/- 50. These participants included the Staff Officers (SO1s) from nine Area Military Health Units (AMHU)

and from different disciplines of the South African Military Health Service (medicine, pharmacy, social work, nursing, psychology and preventative health). The already deployed health care workers of the SANDF were part of participants for this research.

All the participants were expected to complete a consent form before they participate in the study. Participants were to remain anonymous, as their names, current posts and place of posts was not revealed. The semi structured questionnaires was used as a tool to collect data and was confidential once completed. The data collected was kept safe by the researcher who is used to dealing with confidential files on a daily basis in the SANDF. The data collected in this study was analysed by means of content analysis.

1.10 Selection Criteria

The data was collected from the participants of the following units: 1 Military Hospital, 2 Military Hospital, 3 Military Hospital, AMHU FS, AMHU GP, AMHU NW, AMHU LP, AMHU MP, AMHU NC, AMHU WC, AMHU EC and AMHU KZN.

1.11 Chapter Outlines

This research intended to obtain data on the policy's implications for healthcare service rendering to HIV-positive members that are deployed externally by the SANDF. In Chapter One, background to the context of the issues, as well as an introduction to and limitations of the research were presented.

The literature review was presented in Chapter Two of the study. The review elaborated on the background of HIV/AIDS, HIV in the military, the involvement of the SANDF in external missions, the defence forces of other countries, health provision by the SANDF to the HIV-positive members, adherence to treatment and research and policy.

The important or relevant legislation that serves as guidance to the military as a whole and indicates how to care for HIV-infected individuals was discussed in Chapter Three. These legislations included The Constitution, the Defence Act, the previous SANDF HIV policy, the current SANDF HIV policy, the Department of Health guidelines and occupational health and safety act.

The research design and methodology for this study was presented in Chapter Four. A qualitative design with a process evaluation approach was adopted for this research. The study

employed non-probability purposive sampling. Data collection was done through semi-structured questionnaires sent to the participants via the internal SANDF email.

A detailed discussion of the research and the findings was provided in Chapter Five. The implications for the healthcare provision was also considered. The data collected was analysed by means of content analysis.

The conclusion on the findings of the whole research is in Chapter Six. The recommendations of the research is also discussed in Chapter Six.

The understanding of healthcare rendering as the essential obligation of the organisation (SANDF) was clarified in the literature review that follows.

Chapter 2: Literature Review

2.1 Introduction

Onwuegbuzie, Leech, and Collins (2012:4) state that for a literature review to be "rigorous", it should be warranted, transparent, and comprehensive.

HIV/AIDS is one of the pandemics that need to be managed closely by the world. This does not leave the military community out of the monitoring of this pandemic (Thomas, Grillo, Djibo, Hale and Shaffer, 2014:775). The South African Military Health Service (SAMHS) is the SANDF core that has the mandate to provide healthcare to the soldiers and their dependants. (DOD, 2001: A-2). The healthcare that SAMHS should provide includes caring for all chronic illnesses, including HIV/AIDS.

SAMHS should provide healthcare to soldiers, internal and external to the country (DOD, 2001: A-6). In line with this, the Surgeon General (SG) gave the directive on the external deployment ability category of the soldiers in 2009, after the High Court ruling on the previous policy (DOD, 2009; Heinecken and Nel, 2009:345; De Waal, 2009:23). Ingram (2011:663) sees military healthcare capability as one of the modes of engaging with the local community where military members are being deployed. This is also a case with the South African military healthcare staff, because they sometimes give care to the locals of the host country when the need arises.

This review will consider the history of HIV, the HIV in the military, the involvement of the SANDF in external missions, the defence forces of other countries, health provision by the SANDF to the HIV-positive members, adherence to treatment, research and policy and finally the chapter will be summarised.

2.2 The History of the Human Immunodeficiency Virus (HIV)

HIV has been in the world since the early 1980s. HIV still has no cure, but only treatment that suppresses or depresses the viral load and improves the immune system to improve quality of life and to prevent multiplication of the disease in the infected persons (Margolis, Heverling, Pham and Stolbach, 2014:27; Su, Li, Liang, Xiao and Deng, 2014:24). The SANDF (SAMHS) does provide free access to the treatment to all infected members and their dependants. HIV can be transmitted by an individual being in contact with bodily fluids (blood, semen or vaginal fluids) of an infected person (Van Niekerk, 2004:34). HIV can accordingly be contracted by

uninfected members in the case of the military missions in which they are likely to be involved, as it is easy to come into contact with the blood of another soldier who might be infected on the war zone. The fact that there is a high possibility of members coming into contact with other members' bodily fluids, the SANDF as an organisation has the obligation to provide safety to the infected members and their fellow soldiers in the mission areas (The Republic of South Africa (RSA), 1993:8). In the case of the SANDF, the organisation can justify that only the support service personnel are allowed to deploy regardless of their HIV status, as they are not exposed to the elements of fighting.

There are lots of changes that have been implemented in fighting this pandemic worldwide, including changes in militaries. The aim with all the changes that have been implemented continuously is to bring about improvement in care for HIV-infected individuals according to the latest research done in the field of HIV. Even in the SANDF, they follow the latest health guidelines in caring for HIV/AIDS individuals (DOD, 2009: A-7).

The changes over the years introduced a lot of guidelines on the management of HIV. For example, ARVs (antiretroviral drugs) are made available to individuals and indeed improved the life expectancy of the infected individuals, which means that HIV is not a death sentence with an estimated time of survival like before (Horberg, Aberg, Cheever, Renner, Kaleba and Asch, 2010:732; Margolis, Heverling, Pham and Stolbach, 2014:26; Marconi, Grandits, Okulicz, Wortmann, Ganesan, Crum-Cianflone, Polis, Landrum, Dolan, Ahuja, Agan and Kulkarni, 2011:1; Dorrucci and Phillips, 2009:1294; DoH, 2014:18; Reilly, 2010:44; Su et al., 2014:25). However, the provision of these ARVs to the soldiers have to be monitored, internally or externally of the country, according to the aforementioned guidelines.

One of the positive changes was the introduction of free access to the treatment to all infected individuals, which is also the case in the military (Reilly, 2010:43). The SANDF (SAMHS) does provide free access to the treatment to all infected members and their dependants. The treatment administered to the infected individual is called ART. The ART is antiretroviral therapy that consists of the combination of three or more ARV drugs to achieve viral suppression and is provided to the individual for life (DoH, 2014; Su et al., 2014:24). The treatment was started on HIV-infected individual with a CD4 count of less than 350, tuberculosis patients (irrespective of CD4) and pregnant women.

The success of the ARVs depends on adherence by the HIV-positive individual who is started on treatment (Horberg et al., 2010:734; DoH, 2014:36; Aberg, Gallant, Ghanem, Emmanuel,

Zingman and Horberg, 2013:30). Adherence means taking treatment as prescribed and keeping the follow-up appointments for test results, referrals and further investigation (DoH, 2014:36).Depression and substance abuse are highly prevalent among HIV-positive individuals (Aberg et al., 2013:30). The military community is associated with increased use of alcohol, which can make adherence to treatment by the members very difficult. Furthermore, during deployments, following up of HIV-positive members will be difficult, because of limited resources at the mission areas. The relationship between the healthcare workers and the HIV-positive members can make following up difficult since the deployed healthcare workers are usually not from members' mother units.

Even the UN goal of universal access to prevention, treatment and care for individuals infected with HIV/AIDS include military strategies for dealing with HIV/AIDS (Ingram, 2011:664). Similarly, the SANDF (SAMHS) does have programmes in place to fight this pandemic. The background of HIV/AIDS as an illness as discussed will be followed by the HIV in the military

2.3 HIV in the Military

The military has the mandate to protect the country's sovereignty (The Constitution, 1996; Heinecken and Nel, 2009:351). The SANDF has the same mandate to protect South Africa and also to be involved wherever they are tasked by the president of RSA in the world.

2.3.1 Discrimination

No person must be discriminated against in any way by any organisation in South Africa. The SANDF was taken to court for its supposedly discriminating policy by the soldiers unions.

The argument of the soldiers unions (SANDU and SASFU) and human rights activist was that the older policy of the SANDF (SAMHS) did not consider the fact that an asymptomatic HIV-infected person can live a healthy and normal life for years just like an uninfected person. The deployment environment is different from a normal setting and has limited resources to follow up on members with HIV/AIDS. The other factor that was mentioned by the soldiers unions was the fact that the SANDF (SAMHS) argument that they were saying that deploying member have to be fit by not having any chronic condition/illness was not based on any research (Heinecken and Nel, 2009:350).

2.3.2 The Views on HIV and Deployment

The issue of HIV-positive members has been discussed in the country and drew different reactions from the soldiers, the organisation and the unions (Van Niekerk, 2004:32; 34; Heinecken and Nel, 2009:345). This is the main reason why the policy was reviewed and implemented. Now its implications for healthcare rendering should be evaluated over time because of new improvements and guidelines. Some were not for the idea of deploying HIV-positive soldiers, but others felt it was unfair not to allow those soldiers to be deployed (Van Niekerk, 2004:35). However, it can be argued that deploying HIV-infected soldiers is not wrong, provided there are enough healthcare provision systems in place in the mission areas and the healthcare guidelines are followed as necessary.

Heinecken and Nel (2009:341) stated that human rights activists felt that the military was abusing the rights of the HIV-positive individuals through their old policy. The researcher is of the opinion that it was justifiable for the SANDF as an organisation to have used the old policy as few studies on HIV/AIDS and no ARV drugs were available at the time. The SANDF (SAMHS) in the older policy had to test all the soldiers and categorise them according to classification of where the individual can be utilised in the organisation (Heinecken and Nel, 2009:343; Kgosana, 2012:1). . These codes are G (ground duty factor) for total medical fitness of the member for all ground duties and K (geographical/environmental factor) for employment during operations/deployments/services in any or all geographical areas or environments) (DODD/SG/00006, 2009: A-1, 4a-b) The G1 means that a member can work any ground duties and have no medical condition while G2 means the member have got medical condition. The K1 means that a member doesn't need an environment that got medical facility around while K3 means that the member have to work on the environment that got medical facility according the levels. (DODD/SG/00006, 2009: A-1, 4a-b) The SANDF still categorises its soldiers in order to enable the organisation to utilise them effectively and at the right positions, whether internally or externally.

2.3.3 Deployment Environment

The mission areas have limited healthcare resources, compared to when the uniformed members are inside the country, which means that most critical patients have to be repatriated to South Africa for the required healthcare (Heinecken and Nel, 2009:354). This leads to

difficulty in providing the required healthcare to HIV-infected individuals on deployments. However, the SANDF policy does mention that if the HIV-infected member's life will be compromised by the deployment that the member must not be deployed (DOD, 2009: A-12)

The other thing was that since ARVs were introduced, the viral load of an HIV individual can be suppressed for many years (Heinecken and Nel, 2009:345). However, the follow-up on the HIV-infected individual should be done according to the guidelines, regardless of the environment. Consequently, the healthcare rendering in mission areas should be evaluated in terms of what the implications of the policy changes are for mission areas.

Brett-Major, Hakre, Naito, Armstrong, Bower, Michael and Scott, (2012:1333) believe that deployments should be evaluated as the predisposing events to HIV infecting SANDF members. The researcher is in agreement with Brett-Major et al. (2012:1333). The researcher can argue this notion only on the basis that the armies of the world are usually filled by youth and their behaviour can be seen as experimental. Bazergan (2004:1) state that HIV infection is aggravated by the deployment and related conflicts because of the movement and decreased accessibility to healthcare.

2.3.4 Contraction

Heinecken and Nel (2009:353) state that in the military, especially during the war it is easier to be in contact with another person's blood than in the normal population. In the case of the SANDF at the external deployment whereby a peaceful and stable environment can change within a minute to fighting because the rebels are not following any Geneva Convention law of fighting combatants (International Committee of the Red Cross (ICRC), 1949:44).Contracted HIV through another person's blood is seen as the most likely way of HIV contraction in the military during war zone. This does not mean that other modes of transmission are entirely excluded.

The military is seen as a community with a high prevalence of HIV among its members and a high likelihood that members could be infected by HIV, because of the deployments and members' lifestyle (Van Niekerk, 2004:3; Heinecken and Nel, 2009:342; Thomas, Grillo, Djibo, Hale and Shaffer, 2014:772; DOD, 2001: B-1; Bazergan, 2004:2). Soldiers are also seen as the mode leading to the most HIV infections in the areas to which they are deployed (Van Niekerk, 2004:8; Bazergan, 2004:2).The military is usually full of youth ,whereby they are in

the stage of experimenting as (Bazergan,2004:1) mentioned ,that will mean that they may be involved with any infected members

2.3.5 HIV Statistics

The Southern African countries are considered the countries with the highest statistics of HIV-infected militaries (Reilly, 2010:42; Van Niekerk, 2004:2; Heinecken and Nel, 2009:342; Thomas, Grillo, Djibo, Hale and Shaffer, 2014:772; DOD, 2001: vii; Bazergan, 2004: 2; Tan, Earnshaw, Pratto, Rosenthal and Kalichman, 2015:48). This is usually difficult to prove because of the secrecy of the military statistics. However, the SG feels that the statistics of the infected soldiers have been inflated by many (news and researchers) (SG, 2012). Harbertson, Grillo, Zimulinda, Murego, Brodine, May, Sebagabo, Araneta, Cronan and Shaffer (2012) believe that the thought of militaries being the highest in risk for HIV infection is not always the case.

2.3.6 Infection Level

One of the things that are mentioned by Gupta, Wainberg, Brun-Vezinet, Gatell, Albert, Sönnerborg and Nachega (2013:s101) is that new infections are on the rise, especially in Sub-Saharan regions, despite everything that is done in the fight against the HIV epidemic. This means that there is still a lot that should be done, even in South Africa, as the country is part of the sub-Saharan region. This might be the case, but it will be difficult to generalise on the findings because of the fact that military stats are usually kept internal to the organisation, because the organisation's healthcare services are separate from that of the rest of the country. Maina, Kim, Rutherford, Harper, K'Oyugi, Sharif, Kichamu, Muraguri, Akhwale and De Cock (2015 2) state that despite the increased availability of various interventions to manage the HIV/AIDS epidemic, it remains a health challenge, especially in the sub-Saharan region. This is the reason why the SANDF have to follow DoH HIV/AIDs guidelines closely in order to play a role in fighting the HIV/AIDS epidemic in the sub-Saharan region and Africa as a whole.

2.3.7 Impact of HIV

Some researchers believe that not only the organisation will be affected by the HIV-positive status of members, but also the member who finds out about their HIV status, as they will be emotional and psychologically distressed (Van Niekerk, 2004; Hakre, Paris, Brian, Malia, Sanders-Buell, Tovanabutra, Sleigh, Cook, Michael, Scott, Deuter, Cersovsky and Peel, 2012:612). This psychological distress is avoided by the SANDF on deployment because

members are checked prior to deployment and monitored for more than six months before they can be deployed outside of the country.

HIV is considered to have a negative impact on the military in deployment by creating a discrimination of the infected members, low morale between the members (Van Niekerk, 2004). This can make it difficult and dangerous to fellow soldiers because the status of each soldier is not known by the next person, which is fair but does make it easier to come into contact with infected blood in case of injuries. One can argue that protective wear should be used every time a person comes onto contact with any bodily fluids. However, in war situations, it might be a challenge although soldiers are given starter packs which entails few bandages, gloves and taught on how to assist injured member when there are no medical personnel is available on the scene.

2.3.8 Financial Impact

The budget of the SANDF (SAMHS) will also be affected, because a lot of it has to go to HIV treatment (Heinecken and Nel, 2009:348). Campbell (2010:26) conveys the fact that the 1.3% gross domestic product (GDP) budget of the SANDF as a whole is very low, incapacitating the organisation in fulfilling its mandate. The ARV drugs are expensive and in the SANDF (SAMHS) are included in the budget of the organisation, which means they are not are financed separately. This is included in the implications that are to be evaluated by the study, because costs are involved in all the aspects of healthcare rendering. The SANDF is not the only defence force suffering from a decrease in budget, as even in the United States the military's budget was decreased, which was believed could incapacitated the military (Dunmire,2013:3).

2.3.9 Management

In the management of the HIV Thomas, Grillo, Djibo, Hale and Shaffer (2014:773) note that it is important that militaries must have written HIV policies in place for planning (budget, healthcare service, and guidelines on how to care for HIV-positive members). The SANDF does have a written policy of which the implications for healthcare rendering is being evaluated by the present research. This policy gives instructions from the Surgeon General of SAMHS on how the HIV-positive members should be managed in the SANDF.

HIV management and prevention is also a very important factor even in the SANDF, as the organisation has to fulfil that mandate. Some researchers believe that HIV should be managed in the military, because it will otherwise incapacitate the organisation in fulfilling their mandate to the country (Van Niekerk, 2004:14; 15; Heinecken and Nel, 2009:343; DOD, 2001: B-2; De

Waal, 2009:22; Bazergan, 2004:3). It was decided that peacekeepers need pre-deployment education about HIV prevention in the SANDF. The members who are deploying do get pre-deployment briefings that include information on communicable diseases that they can expect in the mission areas to which they are being deployed. HIV/AIDS is always covered as a part of the briefing on communicable diseases. Although Bazergan (2004:6) states that most militaries do mandatory pre-deployment testing, it is very difficult to prove infection rate/transmission in the mission areas, since no testing is done there. The researcher agrees with this statement because uniformed members tend to have careless lifestyles in deployment areas but to be encouraged to use condoms. The deployed uniformed members underwent no mandatory testing in the mission areas or post-deployment. This comes back to the evaluation of the implications of the new policy for healthcare services in the SANDF. The SANDF should provide health prevention measures to all the soldiers, not only to the HIV-infected individuals.

2.4 The Involvement of the SANDF in External Missions

The Republic of South Africa, through the SANDF, is one of the countries that contribute troops for international peacekeeping and enforcement missions of the United Nation (UN) and the African Union (AU), because of security instabilities of the neighbouring countries. (Van Niekerk, 2004:15; Saunders, 2014:154; Heinecken and Nel, 2009:342; Kgosana, 2012:4; Mapisa-Nqakula, 2014:24). This means that stable HIV-infected individuals are being deployed to unstable environments, since the implementation of the new policy. The SANDF has to provide the necessary care to infected individuals in the mission areas. The bigger missions that the SANDF is involved in are in the Democratic Republic of Congo (DRC), Sudan and the Central African Republic (CAR), where 15 of our soldiers' lives were lost (Saunders, 2014:153-154; News24, 2013; Mapisa-Nqakula, 2014:26). The SANDF is one of the militaries that contributed troops for the peace enforcement mission since 2013, which entails them using force and being involved in volatile missions.

Kamangu, Situakibanza, Mvumbi, Kakudj, Tshienda and Mesia (2012) stated that in the DRC opportunistic infections (OI) are still a major problem among the people who are living with HIV. This can be a problem for deployed HIV-infected soldiers because they do come into contact with the DRC population and some of OIs are communicable diseases such as TB. The CD4 count is used to stage HIV, determine the need for prophylaxis against OI, and check the

urgency of and response to ART (Aberg et al., 2013:14). In the case of the SANDF, this means that infected individuals should be followed up on even in the mission area.

Heinecken and Nel (2009:355) believe that the safety of the community in the mission areas has not really been considered since HIV-positive deployed soldiers can be affected or incapacitated by fulfilling their mandate if they fall ill in the deployment area. The researcher believes that the SANDF as an organisation did think of those instances and put measures in place, although the questions of how the policy implicated healthcare is studied here. The involvement of the organisation in external missions leads us to the understanding of the HIV in the military context.

2.5 The Defence Force of Other Countries

Other militaries had similar policies whereby they don't deploy HIV infected soldiers, for example Canada's, Zambia's and many more countries' militaries, as mentioned by Heinecken and Nel (2009:348). The SANDF (SAMHS) has programmes in place to manage HIV/AIDS and to continue research into HIV/AIDS management (SG, 2012). Other DOD programmes, for example project Phidisa and Masibambisane for the SANDF, are sponsored by other countries, for example the United States (Ingram, 2011:667).

Bazergan (2004:4) states that other countries, such as the United States, Russia and China, have mandatory predeployment HIV testing and exclude those members who are infected, while the United Kingdom and France have voluntary testing. The researcher can argue that the SANDF also has mandatory predeployment testing although each member has to give consent to be tested. The US DOD has compulsory periodical testing of its members and those who are found to be infected are not expelled from the force (Brett-Major et al., 2012:1328). This is also the case with the SANDF, as the organisation does not expel members who tested positive, although they were initially not allowed to deploy outside the country until the policy was reviewed in 2009 (DOD, 2009).

All candidates are tested and if found to be infected with HIV, they are not employed by the force (Brett-Major et al., 2012:1329). The US DOD does pre-deployment and post-deployment testing of its members (Brett-Major et al., 2012:1329). This approach could also considered by

other militaries because it could aid them in tracking if deployments are the predisposing environment to the deployed troops.

2.6 Health Provision by the SANDF to the HIV-positive Members

The country's military is supposed to provide healthcare to its members. HIV members should receive all the healthcare benefits and the policy should not discriminate against them (DOD, 2001). The SAMHS treats HIV the same as other chronic illnesses, in terms of the SG's instruction in 2001 (DOD, 2001: vii, Heinecken and Nel, 2009:346). The researcher agrees with other researchers that HIV-infected soldiers should be taken care of and their job should not be terminated once they are found to be infected (Heinecken and Nel, 2009: 346).In terms of the 2009 instruction, it was stipulated that each member has to be utilised according to their medical category classification GIK3 (see Chapter 2) (DOD, 2001:A4; Heinecken and Nel, 2009:346). In practice, it is still the case with the current policy of the SANDF in caring for HIV/AIDS soldiers.

Some researchers believe that with the HIV-positive members, the strain will be felt on the organisational budget as a whole (Van Niekerk, 2004:36; Heinecken and Nel, 2009:348; DOD, 2001:1; Howard Li, Holroyd, Li, and Lau, 2015:13). One can argue that this is not the case, because the organisation has to provide every soldier with medication for any kind of chronic illness and HIV is considered a chronic illness by the organisation. The HIV-positive individual has to be followed up on a regular basis to check for adherence to their treatment programme and for side effects (Heinecken and Nel, 2009:354; Horberg et al., 2010:737; Okulicz, Grandits, Weintrob, Landrum, Ganesan, Crum-Cianflone, Agan and Marconi, 2010:1187; Marconi et al., 2011:2; DoH, 2014; Aberg et al, 2013:9). Even the health guidelines do stipulate that HIV-infected individual should be followed up on regularly.

Members who are not on ARVs should be checked every six months for CD4 cells (T-lymphocyte cell bearing CD4 receptor) in their blood (DoH, 2014:34; DODD/SG/00006; 2009). HIV-infected soldiers are followed up on in their respective sickbays at regular intervals as the DoH HIV/AIDS guidelines stipulate. Members on ARVs should be followed up on every three months and those who have been on treatment for more than a year should be checked every year for their viral load (VL), glomerular filtration rate (eGFR), liver enzymes (ALT)

and CD4 cells count when they are in the country. The researcher is of the opinion that they should also be checked externally on a regular basis.

The CD4 count is dependent on viral load for improvement (DoH, 2014:36; Okulicz, Grandits, Weintrob, Landrum, Ganesan, Crum-Cianflone, Agan and Marconi, 2010:1189; Marconi et al., 2011:2; Cambiano, Lampe, Rodger, Smith, Geretti, Lodwick, Puradiredja, Johnson, Sweden and Phillips, 2010:1153). Therefore, the CD4 count is the measuring tool to confirm if the person is adhering to the treatment and the sign if the treatment fails when the viral load increases. Aberg et al. (2013:17) note that eGFR should be checked more on black infected individuals because there is high evidence that they are more prone to a higher eGFR rate than other population groups. This could be the case for the SANDF because the black population is the highest; however it is not necessarily the case for the SANDF because it was done in the US and their different strains of HIV. The fact that an HIV-infected individual should be cared for in a certain way can lead us to understanding the older HIV/AIDS policy of the organisation.

Li, Holroyd, Li and Lau (2015:13) state that taking care of HIV-infected members requires a multidisciplinary team, which includes nurses, social workers, medical doctors, psychologists and many more healthcare workers.

2.7 Adherence to Treatment

All kinds of treatment that are given to any patients require adherence. Adherence is taking treatment as prescribed, i.e. on the right time and at right intervals, and taking the right dosage. Adherence includes taking treatment as prescribed and keeping to appointments for test results (DoH, 2015:36). For patients to adhere to treatment, they need full support from healthcare workers (DoH, 2015:36).

While Cambiano et al. (2010:1154) believes that not only the health caregiver and patient relationship can have an influence on adherence, but also the healthcare setting, treatment type, psychological status of the patient and social and demographic elements (age, literacy level and ethnicity/race). The healthcare giver and patient relationship as one of the factors that make it easier for the regular check-up and adherence of the patient will be difficult for the SANDF as an organisation to meet in mission areas because the deploying members are from different units around the country. Knapp and Anaya (2010:542) also agree that the relationship between

health caregiver and the patient requiring mental health care can have positive outcomes for treatment compliance and adherence.

The DoH (2015:36) stated that adherence needs constant monitoring and assessment of the patient by the healthcare workers in the clinic. The SANDF is following this guideline in the country. Some researchers like Gupta, Wainberg, Brun-Vezinet, Gatell, Albert, Sönnerborg and Nachega (2013:s101) state that there is lot to be done to encourage adherence and research on the how to use and monitor treatment of HIV/Aids in the long term. The adherence to treatment is the main reason for the ability to suppress HIV for a longer time. Infected members on treatment have to visit to the clinic on a regular basis in order to ensure adherence to treatment and also the way of early detection of side effects and treatment failure.

Gupta et al. (2013:s102) believe that adherence can play a major role in preventing ART drug resistance when the affected member that is on ARVs is taking medication according to the teachings given during the preparation phase of taking ARVs. This is the reason why SANDF members' eligible for treatment complete classes before commencing with ARVs and undergo more than six months monitoring before they can be deployed externally.

Researchers assert that that there is a need for more aggressive methods that can be used to avoid new infections and slow down the viral replications (Gupta et al., 2013:s101). These ways can include regularly monitoring infected members and involving more stakeholders, especially families.

Knapp and Anaya (2010:541) suggest that if the members are not monitored, it can decrease their chances of receiving treatment in time and detecting those members whose condition is becoming weaker. This case supports the notion of follow-up on the deployed troops that are not on the antiretroviral drugs. Although the monitoring of infected members have to be done on a daily basis by the healthcare workers who even have to undertake encouraging members to undergo voluntary testing (DoH, 2015).

2.8 Research and Policy

Donszelmann Oelkea, Alice, Da Silva, Aline and Acosta (2015:114) note that there is a gap between what is done in practice, research and policy. The healthcare policymakers have to

combine what is researched with the policies and implementation following the research. Donszelmann Oelkea et al. (2015:114) believe that the nursing of scientific knowledge and research can improve health outcomes and formulation of healthcare policies. The SANDF can also take the findings of this research and add to the intended review of the policy under study. There are methods that can be followed when developing a policy that was mentioned by Dunn (2013:53), which includes problem structuring, forecasting, prescription, monitoring and evaluation.

2.8.1 Development of Policy

The definition by Dunn (2013:53) is that problem-structuring methods supply policy-relevant information that can be used to challenge the assumptions underlying the definition of problems at the agenda-setting phase of policy making. Berlan, Buse, Shiffman and Tanaka (2014: iii23) believe that the theory behind health policy creation is poor. Berlan et al. (2014: iii24), in addition, state that the most important part that is neglected in the literature that determines if the policy will be implemented successfully and serve its purposes is the relation between setting the agenda and policy implementation. They are of the opinion that if the organisation can involve all the stakeholders from the initial stages of planning any health care policies (Berlan et al., 2014: iii24).

“Problem structuring assists in discovering hidden assumptions, diagnosing causes, mapping possible objectives, synthesizing conflicting views, and visualizing, discovering, and de-signing new policy options" (Dunn,2013:53). Makkar et al. (2015: 1) are of the opinion that there is evidence that there is a need for using research in assisting with the formulation of usable healthcare policies. The healthcare policies may at times be out of touch with the real objectives that are required on ground level. It is therefore important to involve all the stakeholders and use research conducted on the particular health needs on the ground. Makkar et al. (2015: 1) further state that there is an observable gap between the formulation of healthcare policies and relevant research. The reason for the policymakers and researchers to work together by using research findings in the formulation of reachable objectives that will benefit the layman. In the case of the SANDF, the healthcare workers have to be consulted and included in the formulation of policies regarding healthcare matters in the organisation. Makkar et al. (2015:1-2) mentioned that research is one of the factors that contribute in influencing the

formulation of healthcare policies after politics, stakeholders' interests and feasibility. In the SANDF, the research findings can be used by SAMHS in the review of HIV deployment policy.

Forecasting method is for forecasting expected policy outcomes provide policy- relevant information about consequences that are likely to follow the adoption of preferred policies at the adoption phase of policy formulation. (Dunn, 2013:54). There are researchers who believe that the findings of the survey indicators can influence the policy formulation of the country (Maina et al, 2015: 2). The SANDF might consider doing surveys to the lowest rank of the stakeholders that will be affected and effected by any health policy that they intend to implement in future. Makkar et al (2015:2) continue to state that when the research is identified to formulate healthcare policies, policymakers will be able to identify, prioritise how and decide where that research can be used. The SANDF can also take this research as one of ways to measure the newly implemented HIV policy.

Following the forecasting then the prescription can be used. Prescription method is for selecting preferred policy alternatives yield policy- relevant information about the benefits and costs and more generally the value or utility of expected policy outcomes estimated through forecasting, thus aiding policy makers in the policy adoption phase. (Dunn, 2013:54).The policy makers will then choose the final policy that will be implemented.

There are two methods of policy implementation that were mentioned by Rosli and Rossi (2014:4-5). The first method is top-down, whereby the policymakers decide on the objectives (Rosli and Rossi, 2014:4-5). The local authorities implementing policies are excluded from this process (Rosli and Rossi, 2014:4-5). The second method is the bottom-up approach which concentrates on objectives and the needs of the intended beneficiary of the implemented policy are from the local authorities (Rosli and Rossi 2014: 4-5). In the SANDF, the top-down method is used in almost all the policies and the researcher believes that when it comes to health-related issues the healthcare workers can add positive results if they are involved from the planning until the implementation of the policy. This usually leads to failure of the policy because the local authorities are expected to comply with the prescribed expectation of policymakers (Rosli and Rossi, 2014: 4-5). Rosli and Rossi (2014:28) note that the involvement of all stakeholders can decrease the gap between expected objectives and implementation of the policy. They (Rosli and Rossi, 2014:29) continue to state that the communication between all involved parties can also decrease the gap and clarification of all the objectives and characteristics of the

implementation mechanism. After the policy is implemented the policy makers will have to monitor that particular policy.

Berlan et al. (2014: iii25) believes that organisations have to combine the up-down and down-up methods when implementing policies. The Top –down implementation is where the intended policy's objectives are from the policy maker, while in down-up the objectives are from the beneficiaries and ground level communities (Rosli and Rossi, 2014:4).These methods can be used together and involve all the stakeholders. The hybrid method can be of benefit in the sense that all the different views from different levels can be combined in one common understanding. The SANDF as an organisation can get all the angles from policymakers and healthcare workers. Healthcare workers are the ones that are on the ground so it could be easier for them to neither monitor nor ensure implementation. Berlan et al (2014: iii30) also state that policymakers usually do internal and external consultation. In the case of the SANDF, the organisation can compare deployment rates of HIV/AIDS-infected members of other defence forces and employ WHO and UN policies. In addition (CHAPTER 6).

Berlan et al. (2014: iii32) also consider when different stakeholders' inputs are taken into account in the formulation of a policy. Donszelmann Oelkea et al. (2015: 116) agree with this view when they say that policymakers have to include all stakeholders who are involved in the formulation and in the planning of policies. The involvement of all stakeholders will increase the chances of the policy being accepted and reaching intended objectives for the beneficiaries.

Monitoring method is used for monitoring observed policy outcomes provide information about the consequences of adopting policies, thus assisting in the policy implementation phase (Dunn, 2013:55). "Monitoring helps assess degrees of compliance, discover unintended consequences of policies and programs, identify implementation obstacles and constraints, and promote administrative accountability" (Dunn, 2013:55).

According to Rosli and Rossi (2014: 5-6, 8) the gap between policy objectives and implementation increases the ambiguity, which can be solved by involving all relevant stakeholders of policy implementation from the start until the end. The evaluation during planning, implementation and even after the policy is implemented is of importance. The healthcare workers of the SANDF have to be involved from the start until the end. The other thing that the organisation can do is to allow the different members of the multidisciplinary

team of SAMHS directors to conduct surveys about intended policies relevant to their environment and then map out all the findings to create one policy in the end.

Other researchers believes that using research in the formulation of policies is of importance (Makkar *et al*, 2015:1). However, Makkar *et al*. (2015:3) also stated that there are factors that can be barriers to or facilitators of using research in the formulation of policy. The organisations have to consider these barriers and facilitators when doing a research for the formulation of any policy.

There are types that can be used to formulate policies until the point where by the policy is approved for implementation. These type can be either up-down or down up, while Cerna (2013:17) explains that top-down processes entail that policy decisions from the national level are passed on to lower levels. Passing policies does not guarantee their success on the ground (Cerna, 2013:17). This is usually the case with the top-down method of policy formulation, which the SANDF used to formulate most of its healthcare policy.

At this point, Rosli and Rossi's (2014: 3) view that implementation is usually a challenge because of the complex issues and gap between government inspiration and implementation tools becomes important. The policymakers of the SANDF should involve all the stakeholders in order to close the gap by synchronising all the intended objectives. Rosli and Rossi (2014: 4) note that policy implementation is about the government's intentions and the end results of implementation, but that the policymakers should still understand the policy implementation process in order to be able to use relevant instruments to achieve the intended objectives in the end. The SANDF can avoid or address the misunderstanding by involving all the stakeholders – even stakeholders on ground level.

2.8.2 Result of Policy

Evaluation methods as mentioned by Dunn (2013:55) that it is used for evaluating observed policy outcomes yield policy-relevant information about discrepancies between expected and actual policy performance, thus assisting in the policy assessment and adaptation phases.

Some policies do not provide outcomes but rather outputs, because outputs are easier to measure or quantify, while outcomes are more difficult to measure (Rosli and Rossi, 2014:5). The policy objective should be outcomes-based creating a mind-set towards behaviour change

of the involved stakeholders and, moreover, the beneficiaries. The SANDF should make health policies that will enforce change in behaviour of the beneficiaries and that can be of benefit to the organisation's healthcare system. This is where Cerna (2013:4) agrees with other researchers that policy change or reform will not guarantee change of behaviour expected of beneficiaries at the end. Cerna also states that (2013:11) policy change occurs when there is interaction between many external factors, policy-making and subsequent impact on higher levels. The SANDF can try to change this notion by involving all the stakeholders – even stakeholders on ground level.

Dunn (2013:55) also mentioned that evaluation does not only results in conclusions about the extent to which problems have been alleviated, but it also may contribute to the clarification and critique of values driving a policy, aid in the adjustment or reformulation of policies, and establish a basis for restructuring problems.

Makkar, Brennan, Turner, Williamson, Redman and Green (2015:2) stated that it is important to measure a policy's end use. In order for the SANDF as an organisation to check if the intended policy did achieve the initial objectives and if they were relevant for the target group, research have to be conducted (either impact or outcomes research).

One of the factors that Makkar *et al*. (2015:2) stipulate is that the measurement will help in monitoring and evaluating research for the users and beneficiaries and will increase the chances of research being used in the formulation of policies. The SANDF can encourage its uniformed members to choose a topic related to its policies for their research and provide a budget for research on all the implemented policies.

2.9 Summary

This chapter presented the literature review that is related to policies on how the policy is formulated from the start until the end. The reasons for the older HIV deployment policy of the SANDF are considered along with the reasons warranting the change to the current policy that was implemented in 2009.

All the militaries around the globe have policies that govern the execution of certain activities of the organisation. The SANDF is similar to these militaries in that it has policies that govern the organisation's activities. Furthermore, just like with militaries around the globe, these

policies change over time. It seems that health issues change daily and they differ from one country to another.

The notable for chapter two was that all the militaries in the world have to create policies that are in line with their mother country policies in order to function in a non-discriminating manner to their members.

The following chapter will present the laws and regulations that guide the SANDF in addition to those that regulate the SAMHS as the health-related arm of the organisation.

Chapter 3: Policy and Legislative Arrangements

3.1 Introduction

The literature review for this research was presented in chapter 2. In this chapter, the researcher will deal with the Constitution as the highest law of the land, which indeed governs the SANDF as an organisation, RSA (2002), the previous SANDF HIV/AIDS policy regarding deployment of infected members, the current HIV policy regarding the deployment of infected members, and the latest guidelines for caring for HIV-positive patients and other disciplines' guidelines related to caring for such patients. Department of Health guidelines that provide guidelines about how to care for HIV-infected patients and the Occupational Health and Safety Act are considered. A summary of the discussion concludes the chapter.

3.2 The Constitution of the Republic of South Africa of 1996

According to the Constitution, the SANDF is the only defence force that is lawfully mandated to protect and defend South Africa and adheres to international laws that regulate the use of force (The Constitution, 1996:122). The SANDF is mandated by the constitution to be involved in external operations. In light of this responsibility, the revised HIV policy is intended to accommodate infected members of the organisation.

The president as the commander in chief of the SANDF is the only person that has the mandate to deploy the force and should inform parliament within the stipulated time, as set out in the Constitution (The Constitution, 1996: 123; RSA., 2002: 23). The revised HIV policy should be presented to parliament, but the president is the only person that can approve any deployment of uniformed members.

3.3 Defence Act of 2002

The SANDF should defend the country and protect the Republic, its and citizens and its territory (RSA, 2002:13). The SANDF should perform their duties according to the Constitution and the relevant international laws (RSA: 14, 87; ICRC, 1949 and UN). The SANDF members are guided by these laws, whether they are inside or outside the country, depending on the kind of mission and deployment area.

RSA (2002) applies to all the members serving under the DOD, whether inside the country or on outside deployments. The members of the SANDF have to abide by The Constitution, the

RSA (2002) and relevant international laws all the time. It is the view of the researcher that the aforementioned legislation that governs the SANDF should be used by the UN to create one protocol HIV policy that should be followed by all the countries contributing troops on different missions.

The SANDF consist of four arms of service which are SA Army, SA Navy, SA Air Force and SAMHS (RSA, 2002:19). Of these services, the SAMHS is the core that has to provide healthcare services to all the serving members and their families, military veterans and visiting forces from other countries.

3.4 The Previous SANDF HIV Policy

The SANDF (SAMHS) tests troops pre-deployment, just like other militaries (Thomas, Grillo, Djibo, Hale and Shaffer, 2014: 774; Bazergan, 2004: 3). According to the SANDF, the old policy relating to HIV-positive soldiers meant that they were not deployed or promoted and now some other countries do not even deploy them (Van Niekerk, 2004: 12; Heinecken and Nel, 2009: 345; Hakre, Paris, Brian, Malia, Sanders-Buell, Tovanabutra, Sleigh, Cook, Michael, Scott, Deuter, Cersovsky and Peel, 2012: 609; Bazergan, 2004: 3). The prohibition on deployment and promotion was the main reason why the SANDF policy was taken to court, because it was perceived discriminatory. It was indeed proven to be unconstitutional.

Van Niekerk (2004:40) notes that the UN policy did not allow HIV-positive soldiers from countries contributing troops to be deployed (DODD/SG/00006; 2009: A-9). Thomas, Grillo, Djibo, Hale and Shaffer (2014: 7760) and De Waal (2009: 22-23) suggest that the UN policy was not clear on whether countries contributing troops should test their members pre-deployment, further noting that a comprehensive policy could give the countries clear guidelines. The researcher agrees with their argument and believes that if the UN, as the bigger body on external mission, should provide clear guidelines to countries contributing troops.

The SANDF (SAMHS) did the testing of all their members pre-deployment and those who were found to be infected were excluded from deployment (Heinecken and Nel, 2009: 341; Thomas, Grillo, Djibo, Hale and Shaffer, 2014: 772). The HIV-positive members were classified G1K2 (see Chapter 2) (red), which meant that they were permanently unfit for deployment on external missions (DOD, 2001: vii; Heinecken and Nel, 2009). This was the

organisation's policy and was justified by the fact that deploying members had to be fit in all spheres. One can deduce that cannot this cannot be applicable in the current context where ARVs increase life expectancy of infected individuals and where there is more understanding of the HIV/AIDS as disease. It is still important to understand the older policy which led the organisation to the current policy.

3.5 The current SANDF HIV policy

There were countries that deployed HIV-positive troops even before the new policy was implemented in the SANDF (Thomas, Grillo, Djibo, Hale and Shaffer, 2014:774). The SANDF also started deploying HIV-infected soldiers to external missions since 2009.

The military posts, including the deployment areas, should be filled according to standardised category codes. These codes are G (ground duty factor) for total medical fitness of the member for all ground duties and K (geographical/environmental factor) for employment during operations/deployments/services in any or all geographical areas or environments) (DODD/SG/00006, 2009: A-1, 4a-b). All this is clearly stipulated in the SANDF policy on deploying HIV-infected soldiers externally.

Members with G1 and G2 (see Chapter 2) are able to participate in all physical activities expected in their specific mustering. K1 factor is allocated to a member who can deploy anywhere at any time, without any healthcare facility in close proximity. The colour code for external deployment is green (fit for all external duties), yellow (temporarily unfit for external duties) and red (permanently unfit for external duties). HIV-positive members that can be deployed are classified as G2K1 (green) and their clinical stage is considered for classification (DOD, 2009:A-3-A-8; South African National Defence Union vs. Minister of Defence, Secretary of Defence, Chief of the South African National Defence Force, P. Moloto, Acting Chairperson Military Bargaining Council, 2007; Andisiwe Dwenga, Applicant X, Motoai Shadrack Sebatana, South African Security Forces Union, South African National Defence Union vs. Surgeon-General of the South African Military Health Service, Chief of the South African Navy, Chief of the South African National Defence Force, Minister of Defence, President of the Republic of South Africa, 2013:3). The Gs and Ks that are used categorising members should be done in terms of whether there are changes that the experts feel should be made or whether the situation is ideal as it is.

The policy states that for external operations, utilisation of HIV-positive members is based on level of care available in the mission area, whether they are asymptomatic or on ARVs (WHO clinical stage 1), having CD4 count above 350cells/mm^3, an undetectable viral load (DOD, 2009: A-3-A-8; South African National Defence Union vs. Minister of Defence, Secretary of Defence, Chief of the South African National Defence Force, P. Moloto, Acting Chairperson Military Bargaining Council, 2007; Andisiwe Dwenga, Applicant X, Motoai Shadrack Sebatana, South African Security Forces Union, South African National Defence Union vs. Surgeon-General of the South African Military Health Service, Chief of the South African Navy, Chief of the South African National Defence Force, Minister of Defence, President of the Republic of South Africa, 2013:3). The researcher is of the belief that this should change since the baseline of starting ARVs is a CD4 count of 500 in terms of the new guidelines.

Members should be fit to perform their expected duties for the duration of deployment within their capability medically in the mission area and without any additional risk to their health related to their HIV-positive status (DOD, 2009: A-7). The researcher, however, is of the opinion that the policy should mention the health risk towards fellow soldiers, rather than to the infected member only. The policy implication for healthcare management in the SANDF, including every other member, should be evaluated.

ARV treatment may not be initiated in the operational area external to the borders of the RSA (DOD, 2009: A-7). This can be agreed with because an infected individual is started on ARVs inside the country by the SANDF (SAMHS). The occurrence of ARVs' side effects should be monitored and a period of three to six months is required for stabilisation on ARV therapy (DOD, 2009: A-7). If stabilised, the member can be considered for deployment (DOD, 2009: A-7). From personal experience, the researcher agrees with the policy of the SANDF, as all the soldiers eligible for ARVs are initiated inside the country and monitored. The side effects of ARVs usually do not last more than six weeks in most of the individuals who are started on treatment.

Viral load monitoring will be done on a regular basis according to clinical treatment protocols to monitor a member's compliance with ARV treatment. The six-monthly monitoring of a member's CD4 counts should be done to monitor progress of the disease (DOD, 2009: A8). This can be difficult because members spend months on retraining, weeks at DOD Mobilisation and Demobilisation Centre (Bloemfontein) and twelve months on the mission area (and usually

a month or two more before repatriation). This means that the HIV-infected member is spending almost sixteen months away from their mother unit.

Members not on treatment must be asymptomatic (Stage1), have a CD4 count of more than 500cells/mm^3 and have no other health conditions/abnormalities. Members on treatment must be clinically asymptomatic (Stage 1), have a CD4 count of more than 350cells/mm^3, should have a viral load undetectable when the individual complies with the Department of Health ARV treatment protocol and have no other health condition (DOD, 2009: A-8). This is was done in the SANDF (SAMHS) according to the older healthcare guidelines. However, the new guidelines' baseline is a CD4 is 500cells/mm^3, as noted earlier.

The 2013 World Health Organization guidelines suggest treatment initiation based on an immunologic threshold of CD4 ≤500 cells per microliter (Maina, Kim, Rutherford, Harper, K'Oyugi, Sharif, Kichamu, Muraguri, Akhwale and De Cock, 2015: 2). The DoH in 2014 implemented the CD4 count of less or equal to 500 as the threshold to start infected patients on ARVs. The SANDF should review its HIV deployment policy because it is still on the old version of the CD4 of 350.

HIV-positive members are now classified G2K1 in terms of the new policy, which was not the case with old policy whereby the G2 category was not there (see Chapter 2) (Heinecken and Nel, 2009:347; DOD, 2009). This is one of the changes that are included in the current policy along with the colour code (green). The current policy is of particular importance because it is in line with the latest health guidelines on caring for HIV/AIDS.

3.6 Department of Health guidelines of 2014

The minister of health, Dr Aaron Motsoaledi, announced that ART will be initiated on patients with CD4 count of 500 cell/ mm^3 (DoH, 2014: 15). The researcher is of the opinion that this should be evaluated and changed in the SANDF because the policy is still on 350 cell/ mm^3 The DoH (2014: 15) mentioned that the purpose of the guideline was to improve healthcare in order to ensure that HIV-positive individuals have early access to ART. The SANDF (SAMHS) has to ensure that even in deployment areas care is accessible to the intended beneficiaries. The healthcare should be of high quality and should also integrate wellness care (i.e. continuous monitoring of HIV-infected individuals) (DoH, 2014: 16).

The guidelines state that adherence to lifelong treatment like ARV requires ongoing assessment and monitoring at clinics (DoH, 2014: 36; Cambiano et al., 2010: 1153). The healthcare workers of the SANDF should follow up these infected individuals in deployment areas just like inside the country. The aim of the ART is to reduce viral load to undetectable levels and to keep it undetected as well as to improve the immunological status through their CD4 count rising and remaining above the baseline (DoH, 2014: 40; Su et al., 2014: 25-26). This is in line with the SANDF because the person's viral load should be undetectable for the individual on ARVs before they can be considered for external deployment.

Schedule two, three and four substances can only be dispensed for up to six months and authorised by the prescriber (RSA, 1965: s22.ss [6] [f]; Cambiano et al., 2010: 1153). This poses a great challenge to the deploying troops because the missions are twelve months of being physically on the ground. Members have to bring their treatment with them, but according to the Medicines and Related Substances Control Act (1965), the pharmacy is not supposed to issue repeat treatment for more than six months.

The very specific guidelines on caring for HIV/AIDS individuals provide the foundation for the biggest reason for evaluating the implications of the policy on the healthcare-rendering services in the SANDF. The additional related supporting structures of provision of care add the value of the reasoning behind the research. The fact that the neighbouring countries are still unstable and that there are HIV-infected soldiers serving in the SANDF shows that the SANDF as an organisation should still fulfil its mandate of providing health care to its members internally or externally as per problem statement.

A list of the previously deployed healthcare workers can only be obtained from the Health Mobile Formation of the SANDF. The researcher requested permission to conduct research from SAMHS HQ. The previously deployed HIV-positive soldiers will not be included in this current study because the aim is to evaluate the implication of the policy on current healthcare rendering although it will be recommended that future studies evaluate the impact of the policy.

3.7 Occupational Health and Safety Act of 1993

Every employer has to provide a safe working environment to their employees that is free of hazards (RSA, 1993: 8). The SANDF as the employer in this case of deploying uniform members should provide healthcare services to all its members in deployment areas despite their HIV status. One can, however, argue that when it comes to safety of the members, the

organisation will not be able to really provide it because a military itself is a volatile organisation and every member knew that when they joined the organisation. The act furthermore notes that every employee must ensure safety of self and co-worker in the working environment (RSA, 1993: 10). Ensuring co-worker safety might, however, prove difficult because each member does not have access to the information about the member next to him/her in the battle.

3.8 Summary

The laws and the regulations that govern the SANDF and the SAMHS were presented in this chapter on how uniformed members have to work. These laws and regulations are the cornerstone of the SANDF. As an organisation, the SANDF is mandated by different rules and regulations most important of which is the Constitution. The Constitution and the relevant laws and policies considered in this chapter guide the SANDF and its different arms of service on how to operate on a daily basis and conduct its daily tasks.

The SAMHS is also guided by all the above laws and regulations and, in addition, by the DoH guidelines because it is more involved with health issues of uniformed members than other arms of the SANDF.

The following chapter will provide an in-depth discussion of the research design and methodology of this research.

Chapter 4: Research Design and Research Methodology

4.1 Introduction

In this chapter, the research design of the study is discussed. This includes a presentation of the research methodology, specifying the selection criteria, ethical considerations, confidentiality, the data collection procedure, the research instruments and the data analysis technique, among others. Following this, the chapter is concluded by a chapter summary.

4.2 Research Design

Research design is the planning of scientific inquiry and depends on what will be researched and how it will be researched (Babbie and Mouton, 2002: 72). Babbie and Mouton (2015:366) assert that research design is the blueprint of the intended research. Wahyuni (2012:72) in turn, states that research purpose and research questions are the suggested starting points to develop a research design because they provide important clues about the substance that a researcher is aiming to assess. The research purpose and research question were the deciding factors in determining that an empirical qualitative research design was fitting for this study. Babbie and Mouton (2015:641) describe empirical research as the use of methods to investigate observation and experience of the world.

The researcher made use of both primary and secondary data in this research. This research further fell under the interpretive paradigm when considering other researchers description which is that interpretive research employs its findings in uncovering the inside perspectives or real meaning of social phenomena from its study participants (Wahyuni, 2012:72). Knowledge gained from participants is considered a good social knowledge and usually researchers use qualitative methods in order to describe their interpretive research.

The data is made of textual and numerical. This means that findings was explained in writing and in percentages. Qualitative data, according to Wahyuni (2012: 71), Thorne (2000: 68) and Masucci (4), is used by researchers in order to understand the experience and subjective meaning of the chosen participants. While Bricki and Green (2007:2) also agree that qualitative research is characterised by its aims and that it is connected to understanding the social life and ways that produce words rather than numbers when the data is analysed. It is also believed that qualitative research provides rich descriptions of social constructs (Wahyuni, 2012: 71). The

questions that were asked in this research were descriptive in nature. The descriptive questions provided deeper information about what is happening on the ground (Baxter and Jack, 2008: 548).

Because the research focuses on assessing the effectiveness of a particular policy's implementation, the research approach also leans towards implementation evaluation. Babbie and Mouton (2015: 341) state that questions emerge once the design and the development of the programme are completed. These questions include:

- Was the programme implemented as intended?
- Was it aimed at the right population?
- Were the infrastructure and administration in place to support the programme?

These are other questions whereby the researcher was evaluating the programme implementation and the intended outcome as well as the unintended outcome by the programme on the SAMHS of the SANDF. The researcher believed that by evaluating the programme the organisation would be able to answer these common questions after the implementation of the programme. Some researchers, like Babbie and Mouton (2015: 345), note that programme evaluation is important as a form of keeping track of programme activities and processes on the ground.

Babbie and Mouton (2015: 347) further assert that there are three reasons that can make a programme fail. These reasons include:

- Non-treatment: The programme never reaches its intended beneficiary
- Wrong treatment: The way of delivering the intervention negates the treatment and the treatment needs complicated delivery system.
- Unstandardized treatment: There are many discrepancies in the implementation.

The researcher is of the opinion that the reason for the failure of the implementation of the HIV policy could be wrong treatment because there are many factors that SANDF had to consider. These factors include medication stock, follow-up systems, safekeeping and availability of ARVs, and United Nations policies.

The research design had to include a methodology which the researcher considered able to obtain enough data that will help in answering the research question. The methodology of this research will be discussed in the following section.

4.3 Research Methodology

Research methodology is defined by Babbie and Mouton (2015: 647) as the methods, techniques and procedures that are used by the researcher to implement the research design and the explanation of the principles and assumptions of their use. Wahyuni (2012: 72) notes that research methodology and methods mean different things in the research: methodology refers to a model to conduct research within the context of a particular paradigm, while method refers to a set of steps to travel between two places on the map, i.e. research methods are the steps taken to reach a certain point. A research method consists of a set of specific procedures, tools and techniques to gather and analyse data (Wahyuni, 2012: 72). The researcher used the semi structured questionnaires to collect data from the participants.

4.3.1 Target population

Purposeful sampling was used for this research. Wahyuni (2012: 72) describes purposive sampling as specifically picking information-rich cases on the basis of their matched criteria to the sample required to answer the research questions. Bricki and Green (2007: 9) agree that purposive sampling means that the participants are selected based on their knowledge that will give useful data in answering the research questions. The sample for this study include the Staff Officers (SO1s) and the health care workers who were already deployed externally.

The research is interpreted according to the questions in the questionnaire first and integrated by more explanation of percentage. In terms of sampling, 50 participants were selected for the research, of which 34 completed the questionnaire. Babbie and Mouton (2015:278) stated that one of the features for qualitative research is flexibility whereby the changes can be done during the process when the need arises and that the researcher can select a small number of participants for the research. The researcher chose to add to the participants after realising that most SO1s did not have appropriate knowledge on what is happening on the ground in the mission areas. The researcher added health care workers who have been deployed because they are the ones who have more information on what is really happening in the mission areas.

4.3.2 The selection criteria

All the participants are experts in their field of work and senior personnel are in charge of different medical disciplines in the SAMHS. The participants were selected because of their speciality and because of the fact that they are in charge of the number of personnel in each province, which means that they have more access to information from their personnel on the ground after deployments. The already deployed health care personnel's were selected because they got more information about the situation on the ground.

The questionnaire was disseminated by means of the private defence email system. The email was sent to specific members who each got a personal password that allows them to be the only person that has access to the questionnaire. The matter of each person having a personal password to access the questionnaire helped to ensure confidentiality and privacy of the research participants.

4.3.3 Limitations

The chosen method of disseminating the questionnaires could have limited the research in the sense that the participants did not complete the questionnaires. The notion of emailing questionnaires is also seen by Wahyuni (2012: 73) as usually unsuccessful even if it is accompanied by the supervisor's letter. The researcher used the same method of disseminating the questionnaires only because it was seen as the most suitable manner to distribute the questionnaire to participants located throughout the county and could ensure privacy and anonymity for the participants and even maintain the confidentiality of the SANDF as an organisation. When the SO1s lacked detailed information on what is really happening on the ground, it might be because the deployed members never gave feedback to their SO1s and/or because the SO1s themselves have never been in the deployment area since the implementation of the revised HIV policy. The fact that the participants were senior compared to the researcher could been one of the limitations in the sense that the participants do not see the need for the study.

The researcher would like to mention some other challenges that were experienced during the execution of this research. The fact that the researcher has a lower rank compared to the participants that were initially targeted might have been a factor in the lack of responses from the SO1s of different disciplines. The researcher falls under the nursing discipline and other

disciplines did not respond well. Some of the SO1s mentioned that they were never exposed to a deployment area since the implementation of the reviewed HIV deployment policy. The lack of detailed information by SO1s posed a threat on the study and then the participants were grouped with the already deployed members.

The main thing for the SANDF members is to get permission to conduct research, especially research within the organisation. The process of acquiring permission took more time than anticipated. The SAMHS healthcare workers only responded to emails from the Head Quarters (HQ) even though the researcher was granted the authority to conduct the research. The researcher will agree with the healthcare members because as the SANDF, we react to orders and orders come from higher ranks, which means the security and confidentiality of the country are in good hands. The researcher intended to only utilise the defence secured email system, but one can safely say that most of the emails sent by means of this system by the researcher were ignored by the healthcare workers. One of the SO1s advised that personal fax can also be added as the way of responding or returning completed questionnaires to the researcher.

In the SANDF, it is hard to acquire certain information because most of the information must not be in the public domain. The reason for this is state security. The other thing is that acquiring authority takes too long, because a person has to obtain it from the HQ in Pretoria. This is because the letters have to be signed by higher channels of command starting with one's immediate supervisor up to the highest command thereafter.

The other factor that the researcher feels should be mentioned is that there is no input from all three military hospitals. This means that the results are more sickbay orientated. The researcher believes that the military hospitals' views are also important to show the hospitals' side and experiences with the HIV deployment policy that was implemented.

The lotus/secured email of the DOD also had some impact on this research, because it made it possible for people to participate in the research, especially by completing the questionnaires. It specifically helped if the researcher was there physically. The finances also had an impact on the researcher because the researcher could have travelled to all the nine provinces to distribute the questionnaire if she had sufficient funding.

4.3.4 Ethical considerations

The research did not have any ethical issues that can cause any harm to a person or the organisation. Bricki and Green (2007: 5) are of the opinion that the researcher should pay

attention to some ethical considerations towards the participants, colleagues and organisation. These considerations include confidentiality and privacy. However, the SANDF as an organisation has a lot of information that cannot be made available in the public domain. The findings of this research might become part of that information. Firstly the researcher acquired permission from the Defence Intelligence to conduct the research in the SANDF. Secondly the researcher requested permission to conduct the research from the SG and it was granted. The semi structured questionnaire security clearance after completion was to be confidential. The obtained findings was sent to the office of the SG before final submission to the University. The researcher had to also submit the research findings to the Defence Intelligence before the research is submitted to the University.

4.3.5 Procedure and Informed Consent

The participants were asked for their informed consent before participating and had to complete their consent forms prior to completing the questionnaires. The participants were informed that they were participating voluntarily and that they have the choice to terminate their participation at any time if they felt that it was infringing on their rights. This consent form was also emailed and some given by hand to the participants, including all authorising letters from Pretoria (DI, SG, and SSO Nursing AMHF).

4.3.6 Confidentiality, privacy and anonymity

The data is presented according to the field of expertise of the respondents rather than by the name of the individuals, because that would have made it easier to pinpoint the real person in that post in each province. The mustering/medical discipline and the unit where the member is from were included in the questionnaire because it will be easier to compile findings according to mustering/medical discipline. The completed questionnaires were returned to the researcher using each member's individually allocated SANDF email.

Seven provinces responded during this research and the researcher opted not to mention the provinces by name because of confidentiality. The participants were informed on the consent form of this research that their participation is confidential and also anonymous.

4.3.7 Data collection procedure

The semi structured questionnaire was the instrument used .The consent forms were to be emailed to the participants that included nine Officer Commanding (OC) offices of the Area

Military Health Units and three military hospitals. Wahyuni (2012: 74) advises that the data collection questions have to be sent to the ethics committee before distribution. The questionnaire was standardised throughout the provinces. Wahyuni (2012:75) states that questions and aim have to be used as guidelines that will condense the collected textual data to useful and understandable findings.

The questionnaire was emailed with the secured email of the DOD by the researcher although at first, the intended participants did not respond. The second time the researcher sent the questionnaire to the SO1 Oral health Free State to send to the SO1s of other provinces but only received one reply. The researcher asked NAM Kroonstad/Bethlehem to send to SO1s Nursing from other provinces but only received two replies. The SO1s Nursing mentioned that they were not really sure of what is happening on the ground in external mission areas.

The researcher managed to speak to the SO1s when calling them. Some SO1s suggested as the researcher had already planned, that the researcher should use the already deployed healthcare workers for the research. The researcher then resent the questionnaire through that secured email to the SO1s of nursing whereby they were asked to send the questionnaire to SO1s of other disciplines to send it to their subordinates.
The researcher received the completed questionnaires through the DOD's secure email, personal fax and also by hand from the participants. The researcher did not receive all the completed questionnaires from all the provinces. The researcher believed that those who did not answer were not interested to participate, since participation in the research was voluntary.

4.3.8 Data Analysis Technique

Data analysis is explained by Wahyuni (2012:75) as drawing of inferences from raw data.
Analysis triangulation (Hussein, 2009:3; O'Connor and Gibson, 74; Bricki and Green, 2007:26) mentioned that some writers mention using more than one method in analysing the same data in order to enhance validity and completeness. Wahyuni (2012:75) also mentioned that the qualitative data have to be prepared for analysis in three steps: storing the data, transcribing audio sources and cleaning the data. Wahyuni (2012:76) mentioned that the common approach to the interpretation of meanings from textual data is using content analysis, because it tries to show the reality from textual data. Howell's ordinal scale will be used, whereby the findings will be ranked according to "strongly agree" to "strongly disagree".

Wahyuni (2012:75) emphasises the importance of the safekeeping of the obtained data from different methods that were used by the researcher. In this research, the data will be kept safe on the researcher's DOD-allocated email and locked in an office cupboard that the researcher is using for confidential work files. Cleaning of data is when the researcher chooses what is to be included or not to be included and how it is to be presented in the findings (Wahyuni, 2012:75). The researcher only separated the findings according to the different disciplines/directorates of the SAMHS.

4.3.9 Reliability and validity

Validity is the criteria used to check how accurately the methods used reflect what needs to be measured or how effective the design is in employing methods of measurement that will capture the data to address the research questions (Babbie and Mouton, 2015:648; O'Connor and Gibson, 72; Baxter and Jack, 2008:556). Wahyuni (2012:77), in turn, describes reliability as the consistency of measures. He (Wahyuni, 2012:77) further states that research, especially, has to depend heavily on reliability and validity in order to ensure its replicability and generalisability. Not excluding Wahyuni's (2012:77) views, other researchers criticise the view that qualitative research can only be measured by the two. In line with this thinking, Wahyuni (2012:77) did mention that there are other ways of evaluating the quality of the qualitative research, which include credibility, dependability, transferability and confirmability.

Wahyuni (2012:77) described factors used to measure the quality of research. Credibility refers to whether the data represent the real observed social phenomena (Wahyuni, 2012:77). Dependability corresponds to the notion of reliability, which promotes replicability or repeatability (Wahyuni, 2012:77). Transferability refers to the extent to which the research will be applicable to other situations (Wahyuni, 2012:77). Confirmability refers to the extent to which others can confirm the findings in order to ensure that the results reflect the understandings and experiences from observed participants, rather than the researcher's own preferences (Wahyuni, 2012:77).

4.3.10 Pilot Study/Instrumentation

The instrument to collect data was the preliminary questionnaire which was compiled by the researcher for the SO1s of AMHU FS for the testing before it was disseminated to all provinces around the country. The questionnaire was structured as follows: Section A was only the

mustering and the unit of which the participant/subject is working and section B was the question section. These two was to illustrate what were the views of different disciplines in the SAMHS. The researcher did not include names and ranks of the participants because that information is not necessary for the findings of this research. The researcher divided the questionnaire into four sections. The questionnaire consists of 15 questions that are divided into three titles that consist of five questions each relating to the following: organisation, healthcare (SAMHS), patients and any additional information that the participant would have liked to mention.

4.3.10.1 Organisation is based on finding the views about HIV policy

This section of the questionnaire had more questions about the HIV policy and structures in place for caring for the HIV-infected members in the mission areas. The participants were expected to choose one answer that suits their views about the statement or question in the questionnaire. The scale for answers ranges from strongly agree, agree, not sure, disagree to strongly disagree.

4.3.10.2 Healthcare (SAMHS)

This section of the questionnaire was more about the healthcare workers and their level of knowledge about the HIV deployment policy. In addition, this section of the questionnaire requires the participants to choose one answer that suits their views about the statement or question in the questionnaire. The scale for answers ranges from strongly agree, agree, not sure, disagree to strongly disagree.

4.3.10.3 Patients

This section was about the medication and caring for the HIV-infected deployed members in the mission areas. In addition, this section of the questionnaire required the participants to choose one answer that suits their views about the statement or question in the questionnaire. In this section, the same scale range from strongly agree, agree, not sure, disagree to strongly disagree was used.

4.3.10.4 Please indicate additional information that you would like to mention

This part of the questionnaire required the healthcare workers to share any information that they would have liked to mention and which was not covered by the rest of the questionnaire. The participants were to address this section in their own words and there was no stipulated

order that their statement should take. This section of the questionnaire was not compulsory but was to be completed on a voluntary basis. Anyone who did not fill this part was still be part of the research.

Chapter 5: Data Analysis

5.1 Introduction

This chapter provides a detailed discussion of the research and the findings. The implication on the healthcare provision from the healthcare workers will also be interpreted. Data collected was analysed by means of content analysis.

This chapter will first discuss the findings of the research of the questionnaire that was sent to the respondents. The discussion of these findings will be followed by the number of the replies, the percentage of the replies of the participants, the number answers per question, additional data which relates to organisation, healthcare (SAMHS), patients and any additional information that was written by the participants. The overall discussion of the findings will be done in terms of organisation, healthcare/SAMHS, patients, limitations of the final findings, and the summary of the chapter.

5.2 The Findings

In the SAMHS's different disciplines, nursing is the discipline that participated the most in this research. Each of the following areas provided a participant: oral health, pharmaceutical, preventative health, psychology and social work.

Table 1: The number of replies

Discipline	Nursing	Medicine	Pharmaceutical	Oral health	Social Work	Preventative
Number of participants	28	2	1	1	1	1

The above table represents the number of participants of this research, i.e. N=34 (number of the participants) and n=% of each discipline.

The total number of the participants who answered the sent questionnaires was 34(N=34). Because of anonymity, only the disciplines represented by the respondents will be used. A total of 28 nursing personnel answered the questionnaire, which makes nursing the discipline with the highest response rate. Only two social workers responded while from medicine, pharmaceutical, oral health and preventative health only one participant from each area responded. Even though fewer responses were received from the other disciplines, all the SAMHS disciplines are represented in the research. There were always going to be more

respondents from the nursing environment, as the nurses are the most deployed group in the field and also the most knowledgeable about what happens on the ground during the missions.

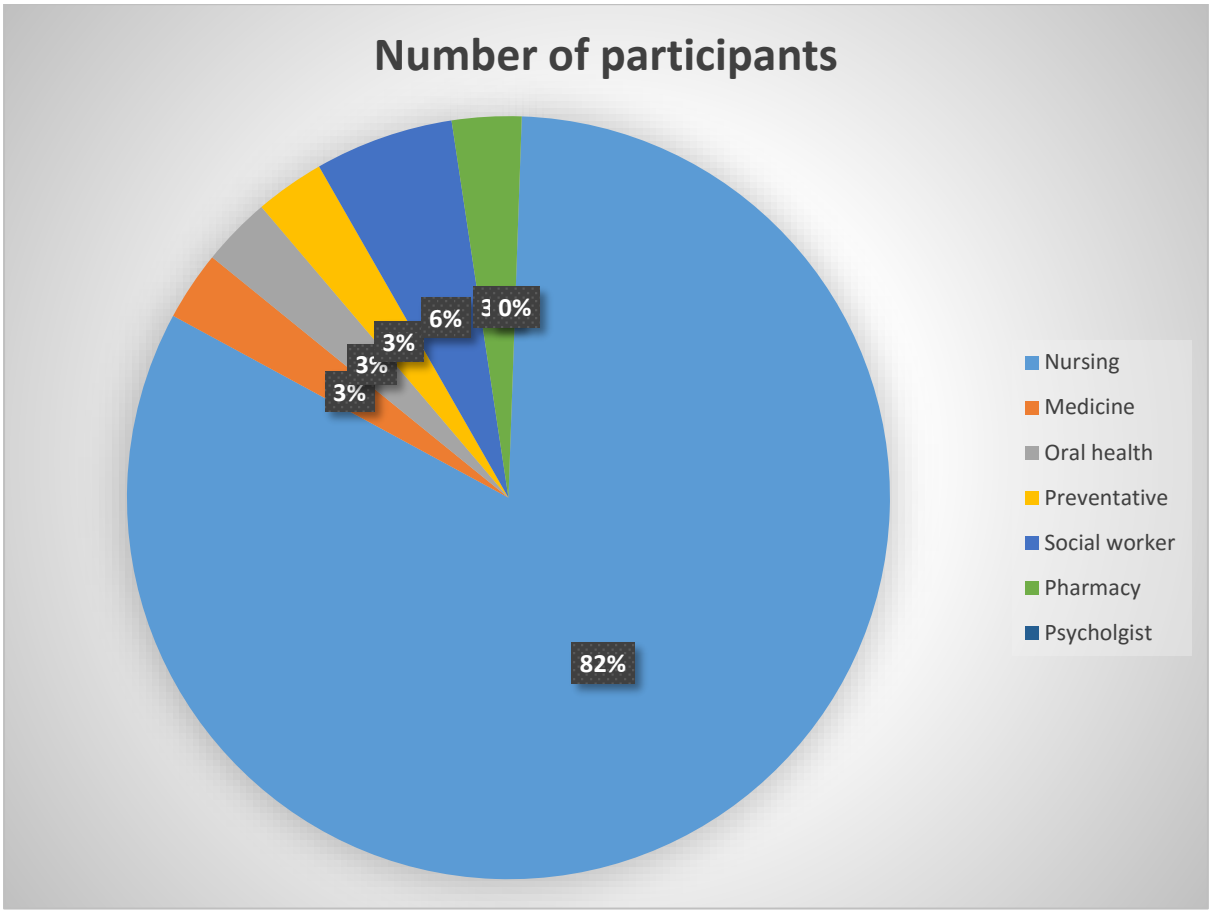

Figure 1: The percentage of responses received from participants

The largest percentage of the participants is nursing, which is 82% of the total number of responses that were received by the researcher. The medicine discipline is 6% of the responses that were received. Oral health, social work, preventative health and pharmaceutical are 3% each of the total responses of the healthcare workers who participated. Psychology is 0% because the researcher received no response from them.

Table 2: Summary of the characteristics of the participants (healthcare workers): n=34 and n=%

Discipline	**Number of participants (n)**	**Percentage (n)**
Nursing	28	82%
Pharmaceutical	1	3%
Medicine	2	6%
Oral health	1	3%
Social work	1	3%
Preventative health	1	3%

The number of nursing is 82%, medicine 6%, oral health, preventative health, pharmaceutical and social worker are 3% each. This is a sign that this research is more nursing inclined. This will have an impact and will be a contributing factor in the results of this research on the HIV deployment policy.

Table 3: The number of answers per question (indicated in frequencies with N=34)

Organisation	Strongly Agree	Agree	Not sure	Disagree	Strongly Disagree
Are you aware of the HIV/AIDS deployment policy?	24(70%)	5(15%)	3(9%)	2(6%)	
The healthcare setup at the mission area was sufficiently equipped/prepared before the HIV deployment policy was implemented.	3(9%)	11(32%)	8(24%)	7(20%)	5(15)
There are clear guidelines on how to care for infected members in the mission areas.	4(12%)	8(24%)	10(29%)	11(32%)	1(3%)
There are clear policy guidelines to evaluate infected members after external deployment.	7(20%)	8(24%)	8(24%)	11(32)	
There is a new, reviewed HIV policy in place to accommodate DoH guidelines based on the new baseline of 500 CD4.	8(24%)	10(29%)	10(29%)	4(12%)	2(6%)
Healthcare (SAMHS)					
The revised HIV deployment policy of SAMHS is clear to all the healthcare personnel and the DOD as an organisation.	2(6%)	11(32%)	11(32%)	5(15%)	5(15%)
There is a new structure of healthcare personnel in the mission areas after the implementation of the HIV deployment policy.	1(3%)	1(3%)	12(35%)	15(44%)	5(15%)
Before deployment, healthcare personnel are informed about the guidelines on how to care for HIV-positive members in the mission areas.	5(15%)	7(20%)	10(29%)	6(18%)	6(18%)
Deployed healthcare personnel are fully informed of the guidelines on how to take care of the emergencies or mass casualties in the mission areas.	3(9%)	14(41%)	9(26%)	4(12%)	4(12%)
There are changes on medication and equipment demands after the HIV deployment policy was implemented in the mission areas. (Enough ARV stock and equipment in the mission areas to accommodate all the HIV-positive members on treatment.)		13(38%)	8(24%)	9(26%)	4(12%)
Patients					
There are enough healthcare professionals who care for HIV-positive members in the mission areas.	5(15%)	8(24%)	10(29%)	10(29%)	1(3%)
Dispensing guidelines on HIV medication are sufficient in the mission areas.		13(38%)	10(29%)	7(20%)	4(12%)
There are new guidelines for dispensing HIV medication for 12-month deployments.		3(9%)	24(71%)	4(12%)	3(9%)
There are clear guidelines on how to monitor HIV-infected patients on treatment in the mission areas.	2(6%)	4(12%)	16(47%)	8(24%)	4(12%)
There are clear guidelines on how to monitor HIV infected patients not on treatment in the mission areas.	1(3%)	3(9%)	14(41%)	9(26%)	7(20%)

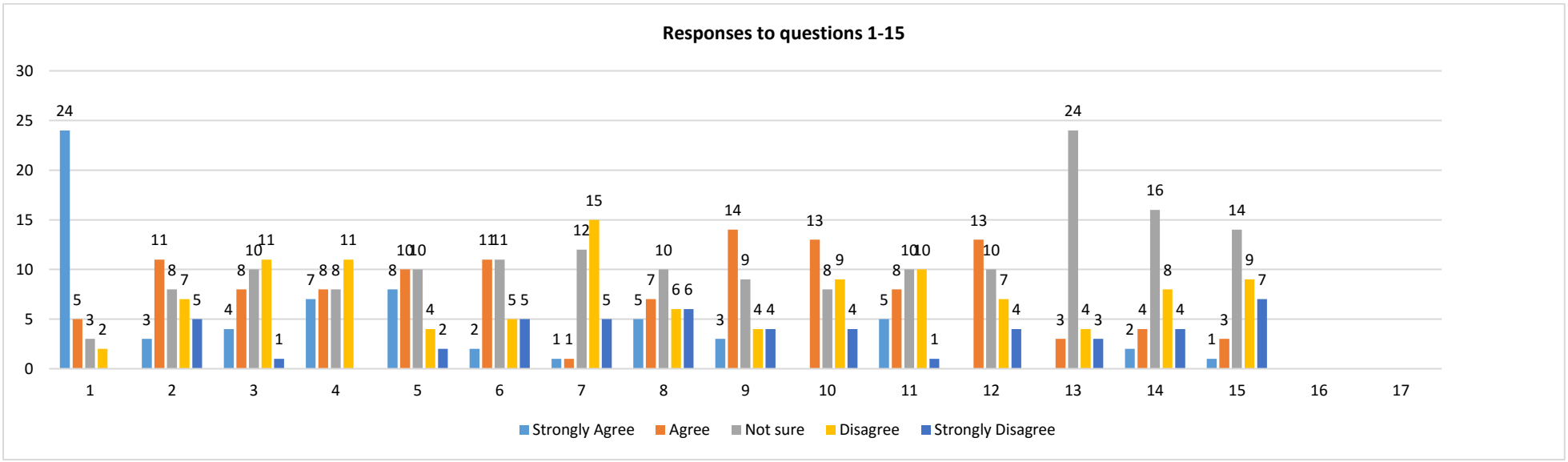

Figure 2: Responses to all questions

The above graph illustrates the responses to all questions. From this graph, it is clear that positive responses were only more to questions 1 and 5 than the negative responses.

Table 4: Summary of the replies of the questionnaire. N=34(total number of the participants) and n (%)

Organisation	Strongly Agree	Agree	Not sure	Disagree	Strongly Disagree
Are you aware of the HIV/AIDS deployment policy?	24(70%)	5(15%)	3(9%)	2(6%)	
The healthcare setup at the mission area was sufficiently equipped/prepared before the HIV deployment policy was implemented.	3(9%)	11(32%)	8(24%)	7(20%)	5(15)
There are clear guidelines on how to care for infected members in the mission areas.	4(12%)	8(24%)	10(29%)	11(32%)	1(3%)
There are clear policy guidelines to evaluate infected members after external deployment.	7(20%)	8(24%)	8(24%)	11(32)	
There is a new, reviewed HIV policy in place to accommodate DoH guidelines based on the new baseline of 500 CD4.	8(24%)	10(29%)	10(29%)	4(12%)	2(6%)
Healthcare (SAMHS)					
The revised HIV deployment policy of SAMHS is clear to all the healthcare personnel and the DOD as an organisation.	2(6%)	11(32%)	11(32%)	5(15%)	5(15%)
There is a new structure of healthcare personnel in the mission areas after the implementation of the HIV deployment policy.	1(3%)	1(3%)	12(35%)	15(44%)	5(15%)
Before deployment, healthcare personnel are informed about the guidelines on how to care for HIV-positive members in the mission areas.	5(15%)	7(20%)	10(29%)	6(18%)	6(18%)
Deployed healthcare personnel are fully informed of the guidelines on how to take care of the emergencies or mass casualties in the mission areas.	3(9%)	14(41%)	9(26%)	4(12%)	4(12%)
There are changes on medication and equipment demands after the HIV deployment policy was implemented in the mission areas. (Enough ARV stock and equipment in the mission areas to accommodate all the HIV-positive members on treatment.)		13(38%)	8(24%)	9(26%)	4(12%)
Patients					
There are enough healthcare professionals who care for HIV-positive members in the mission areas.	5(15%)	8(24%)	10(29%)	10(29%)	1(3%)
Dispensing guidelines on HIV medication are sufficient in the mission areas.		13(38%)	10(29%)	7(20%)	4(12%)
There are new guidelines for dispensing HIV medication for 12-month deployments.		3(9%)	24(71%)	4(12%)	3(9%)
There are clear guidelines on how to monitor HIV-infected patients on treatment in the mission areas.	2(6%)	4(12%)	16(47%)	8(24%)	4(12%)
There are clear guidelines on how to monitor HIV infected patients not on treatment in the mission areas.	1(3%)	3(9%)	14(41%)	9(26%)	7(20%)

5.3 Discussion of the summary of the responses to the questionnaire

5.3.1 Organisation

On the first question of the questionnaire, *Are you aware of the HIV/AIDS deployment policy?*, 70% strongly agree, 15% agree, 9% are not sure while 6% disagree that they were aware of the policy. As 85% of respondents either agree or strongly agree with this question, it is safe to state that most of the healthcare workers claimed to know about the existence of the HIV deployment policy.

The second question/statement was: *The healthcare setup at the mission area was sufficiently equipped /prepared before the HIV deployment policy was implemented*. The responses were that 9% strongly agree, 32% agree, 24% are not sure, 20% disagree and lastly 15% strongly disagree with the statement. Therefore, 41% of healthcare workers agree to some extent that there was some preparation before the implementation of the HIV deployment policy, while 35% disagree and 24% are not sure.

A total of 12% of the respondents strongly agree and 24% agree with the third statement/question, which is: *There are clear guidelines given on how to care for infected members in the mission areas.* A further 29% are not sure, 32% disagree and 3% strongly disagree. This means that only 36% of the healthcare workers feel confident that the guidelines for caring for infected members in the mission areas are clear.

The next statement posed to respondents was: *There are clear policy guidelines to evaluate infected members after external deployment.* Here, 20% of respondents strongly agree, 24% agree, 24% are unsure and 32% disagree. Therefore, 44% of healthcare workers to some extent agree that there are clear guidelines to evaluate infected members after external deployment.

On the statement indicating that *There is a new, reviewed HIV policy in place to accommodate DoH guidelines based on the new baseline of 500 CD4,* 24% of respondents indicated that they strongly agree, 29% agree, 29% are not sure, 12% disagree and only 6% of the healthcare workers strongly disagree. Therefore, 53% of healthcare workers are aware of the reviewed HIV policy.

5.3.2 Healthcare (SAMHS)

Statement: *The revised HIV deployment policy of SAMHS is clear to all the healthcare personnel and the DOD as an organisation.* On this statement, 6% strongly agree, 32% agree, 32% are not sure, 15% disagree and another 15% strongly disagree. Here, the majority of respondents, 62%, indicated that the revised HIV deployment policy of SAMHS is unclear or they are uncertain about the clarity of the policy, with only 38% indicating that they think it is clear to all.

Statement: *There is a new structure of healthcare personnel in the mission areas after the implementation of the HIV deployment policy.* Only 3% strongly agree and another 3% agree Thirty-five per cent are not sure. There is a vast difference between agreeing and disagreeing because 44% disagree and 15% strongly disagree about the new structure at mission areas after the deployment of infected members. It is then to be deduced that the majority of respondents (94%) do not know of any new structure for healthcare personnel in the mission areas after the implementation of the HIV deployment policy.

Statement: *Before deployment, healthcare personnel are informed about the guidelines on how to care for HIV-positive members in the mission areas.* Fifteen per cent strongly agree, 20% agree and 29% are not sure while 18% disagree and 18% strongly disagree. Therefore, a total of only 35% of respondents are certain that healthcare staff are informed of the guidelines on how to care for infected patients before deployment.

Statement: *Deployed healthcare personnel are fully informed of the guidelines on how to take care of the emergencies or mass casualties in the mission areas*. Nine per cent of the healthcare workers strongly agree, 41% agree and 26% are not sure while 12% of them disagree and 12% strongly disagree. There is therefore, a 50-50 split between healthcare workers who indicated that they are informed regarding the guidelines on the care of mass casualties during emergencies and those who do not feel that they are fully informed or are unsure about these guidelines.

When asked if changes to medication and equipment demands were implemented after the HIV deployment policy was implemented (i.e. enough ARV stock and equipment in the mission areas to accommodate all the HIV-positive members on treatment), 38% of the healthcare workers agreed, while 24% were not sure, 26% disagreed and 12% strongly disagreed. As with

the other statements, the minority is in agreement with only 38% convinced that the stock and equipment to accommodate all HIV-positive members are sufficient.

5.3.3 Patients

Statement: *There are enough healthcare professionals who care for HIV-positive members in the mission areas*. There are 15% of respondents who strongly agree, 24% who agree and 29% who are not sure while 3% strongly disagree. Of the healthcare workers who disagree that there are enough, no one added the reasons for this perceived need for more staff.

Statement: *The guidelines for dispensing of HIV medication are sufficient in the mission areas*. The 38% strongly agree while 29% are not sure, 20% disagree and only 12% strongly disagree.

Statement: *There are new guidelines or dispensing HIV medication for 12-month deployments.* Only 9% strongly agree, 59% are not sure, 12% agree and 9% strongly disagree with the healthcare workers about the dispensing of treatment to HIV-infected members who are deploying. The vast majority of the healthcare workers are therefore not sure about the issuing of treatment to those infected members for deployment. One could speculate that that is where there confusion and challenge are experienced the most.

Statement: *There are clear guidelines on how to monitor HIV-infected patients on treatment in the mission areas.* There are 6% of healthcare workers who strongly agree and 12% who agree, while 47% are unsure, 24% disagree and 12% strongly disagree. Only 18% therefore indicate that they know how to monitor HIV-infected members.

Statement: *There are clear guidelines on how to monitor HIV infected patients not on treatment in the mission areas.* There are 3% who strongly agree, 9% who agree, 41% who are unsure, 26% who disagree and 20% who strongly disagree about the existence of guidelines on how to monitor infected members who are not on treatment in the mission areas. A positive response of only 12% was therefore attained in response to this statement.

5.3.4 Additional information

5.3.4.1 Organisation

The researcher asked the participants to mention any additional information they would like to bring forward, which was not covered by the questionnaire.

Other respondents mentioned that policies are available but the implementation part of it is the challenge in the SANDF. The researcher believes that if the organisation can follow the South African government's way of creating or reviewing the policy by circulating it even to the lowest ranking personnel for their opinions on the intended policy. All the members will therefore be well informed about all the organisational policies.

5.3.4.2 Health care (SAMHS)

They are comments that were mentioned by the respondents included that healthcare workers from the hospital setup might not be aware of the reviewed HIV policy. Other respondents mentioned that every healthcare worker only relies on their personal training because there is no extra HIV/AIDS training that is given prior to deployment.

One respondent mentioned that SAMHS should familiarise members of the SANDF about the policy and how it works.

5.3.4.3 Patients

One of the respondents believes that there is poor support from the internal healthcare facilities of SANDF because there are times when the patients go without medication and had to be given medication from other patients' stock. Some respondents believe that the flight delays are the main reason for medication shortages. Another opinion is that there is a challenge with regard to storage of the ARVs in the mission areas.

One respondent mentioned that even prior to deployment at De Brug, members' stay some months that is additional challenge on medication. The other thing that was mentioned was that there are no clear guidelines on how to care for infected members at the mission areas. Other respondents mentioned that according to their opinion, the mission area is not accommodating towards HIV-infected members because of increased stress levels and easy accessibility of alcohol, especially in the DRC

One respondent mentioned that one of the things that causes challenges for replenishment is delayed flights from the Republic of South Africa (RSA) to the mission areas. There are times when the flights for replenishing necessities to the deployed members in the mission areas do not arrive on the scheduled times. This is when the expected treatment for HIV-deployed members will be delayed. In the missions, the landing rights are obtained from the hosting country and if not obtained the, C130 will not even leave Waterkloof Air Force Base in Pretoria.

Other respondent mentioned the storage of the medication and the follow-up routine is one of the challenges in the mission areas.

However there is a respondent that believed that everything will be well if only HIV-infected members on treatment can take enough medication with them to the mission areas

5.4 The Discussion of the Findings

5.4.1 Organisation

The final findings that the researcher received, especially from the nursing discipline, are interpreted in terms of number of responses per question.

The researcher found that healthcare workers are fully aware of the implemented policy. There is 70% of the responses that strongly agree with the statement of the awareness of the implemented HIV deployment policy while only 6% disagree that they know about this policy that is not sure of the policy. The participants agree with the preparedness of the healthcare facility in the mission while those who say they are not sure and disagree are equal.
The healthcare workers seem to disagree with the notion of the guidelines in caring for HIV-infected members in the mission areas. Some mentioned that each healthcare worker relies on personal training. There are healthcare workers who are not sure of the clear guidelines. This may be the case because the guidelines that govern inside the country have to be followed even outside the country.

The healthcare workers believe that SANDF does not check whether the infected members deteriorated during the time of deployment externally although there are some healthcare workers who believe that infected members are checked after the deployment. The healthcare

workers are therefore not sure of the reviewing of the HIV members' deployment although it was mentioned in the 2009 policy that it will be reviewed in 2015. There is also an equal number of healthcare workers who agree that there is a new reviewed HIV policy, but the researcher is not sure if they are talking about the one that is in place. The researcher cannot overlook that there are healthcare workers who disagree that there is a reviewed policy because they do not know anything about it. The organisation has to accommodate new DoH guidelines on the review of the HIV deployment policy.

5.4.2 Healthcare (SAMHS)

Respondents are split between those who think that the HIV policy is known within the organisation and those who are not sure whether it is. It is difficult for the researcher to make a deduction but it is shown that some healthcare workers are informed about this HIV policy while the others are not sure. The SANDF as an organisation has to find the means to inform the organisation about their policies and also involve them in the initial stages of creating them.

The healthcare workers disagree that there is a new structure of the healthcare workers in the mission areas after the implementation of the policy. The researcher also agrees that the only things in which the SANDF must involve the healthcare workers are policies and then changing the structure in the mission areas.

The healthcare workers are not sure of the guidelines on how to care for HIV-infected members in the mission areas. There are healthcare workers, even if only a small number, who agree that there are guidelines. The researcher's opinion is that the organisation should include these policies in the mobilisation programme for the healthcare workers. The other thing that SANDF should do is to give the healthcare workers the details of the infected members that are going on deployment at the mobilisation.

The healthcare workers fully agree with the fact that they are well informed about the guidelines on the caring for infected members during emergencies in the mission areas. Although there is also a small number who disagreed with the emergency guidelines for caring for HIV-infected members at the deployment areas. This is observed by the researcher when they contradict the statement about knowledge of the guidelines on how to care for infected members, whereby these healthcare workers were not sure. Otherwise the researcher can also

state that if the healthcare workers have knowledge of the emergency guidelines, SAMHS have to inform them about all the guidelines or involve the different directorates from different disciplines of the healthcare system.

On the increase of the medication and equipment in the mission areas after the implementation of the 2009 HIV deployment policy, the healthcare workers generally agreed, with a small percentage of respondents strongly disagreeing. The biggest challenge on the increased demand of medication needed at the mission only been started after the implementation of the HIV deployment policy in 2009.

5.4.3 Patients

The finding is that the healthcare workers disagree that the current professionals in the mission areas that care for HIV-infected members are aware of the policy. There are other healthcare workers who agree that there are enough professionals in the mission areas. The researcher might not fully agree with the healthcare workers but feels that the current professionals should be given comprehensive guidelines and a conducive environment in which to follow them. It is also important to have enough psychologists because some of the respondents mentioned that stress levels are higher in the mission areas and for infected members. One can agree that it can add to infected members' CD4 count going down, while viral load goes up.

Most of the healthcare workers agree that there are guidelines for dispensing of medication at the deployment area, rather than those who disagree. The researcher can say this seems to be important information to the rationale of this research which was that the biggest challenge was medication shortages. This is surely an interesting finding that can correct the researcher's perceptions. It may be that if the already deployed pharmacists participated in the research outcome could have been different. Nonetheless, the researcher still believes that the organisation should look at the guidelines on handling the ARVs in the mission areas.
The other interesting finding is that there is a large number of healthcare workers who are not sure about the guidelines on dispensing medication to the members who are being deployed for twelve-month periods. These twelve-month periods might be the reason for confusion about the issuing of ARVs. The other thing that is noticed by the researcher is that other healthcare worker agreed with the clear guidelines on issuing treatment to the infected members.

Healthcare workers are not sure of the guidelines regarding the monitoring of infected members who are on treatment. Only very few healthcare workers said there are clear guidelines on monitoring the infected members who are on treatment. One of the participants mentioned that every healthcare worker relies on their individual training.

The healthcare workers are not sure on the guidelines on monitoring the deployed HIV-infected members who are not on treatment. There are also healthcare workers who are disagreeing with the availability if these guidelines on monitoring HIV-infected members in the mission areas. The researcher is still of the opinion that the guidelines on working with HIV-infected members at the deployment areas should be included in the intended review of the current policy.

5.5 Summary

The findings of this research clearly showed that healthcare workers are aware of the HIV deployment policy although they mentioned that they disagree with regard to having knowledge of the guidelines for caring for infected members at the deployment areas. There was an equal split between health care workers who agree and those who were not sure about the new reviewed HIV deployment policy.

The review that was mentioned relating to the current HIV deployment policy was to be done in 2015, but was not done. There has been no new structure of healthcare workers since the implementation of the HIV deployment policy. Healthcare workers are not sure of the guidelines for caring for infected members that are given to healthcare workers prior to their deployments. What is interesting is that there was an increased demand for medication in the mission areas since implementation of this policy. There are no guidelines for the issuing of ARVs to the members who are deploying for twelve months.

Chapter six below provides a summary and a conclusion to this research.

Chapter 6: Conclusions and Recommendations

6.1 Introduction

The implemented HIV/AIDS deployment policy of 2009 in the SANDF was a great decision by the organisation, because it is non-discriminatory and is in line with the Constitution of South Africa. The challenges that are faced by the healthcare workers in the mission areas are suspected to occur because the HIV deployment is still new. The challenges can be corrected by the organisation.

The researcher in chapter six will summarise the chapters, identify the conclusion according the objectives that were outlined in chapter one and end with the recommendations and possible researches that can be conducted.

6.2 Summaries of Chapters

Chapter one introduced the broader picture about the SANDF that was taken to court by the unions of the serving members .The Unions took the organisation to court because of the HIV/AIDS policy that was seen as discriminating to the HIV infected members. The HIV/AIDs policy was further discussed on the reason that was seen as discriminating.

The researcher decided to find out about the implication of the HIV/AIDS policy on the health care rendering to the infected members at the external deployments. A qualitative case study research design with the SO1s and already externally deployed health care workers as the unit of analysis was proposed to answer the research question. Chapter one provided a layout of each chapter in this research as the guide to the reader.

Chapter Two developed and outlined a literature review for the key concepts within the research question. The concepts are:

- The History of the HIV
- The HIV in the military
- The Involvement of the SANDF in external missions
- The defence forces of other countries
- Health provision by the SANDF to the HIV positive members
- Adherence to treatment
- Research and policy

Each of the mentioned concepts has been discussed in terms of this research. The most important outcome of chapter two was that all the militaries in the world have to create policies that are in line with their mother country policies in order to function in a non-discriminating manner to their members.

Chapter three developed and presented a legislative context of the HIV infected members of the SANDF .The legislative context is provided by the South African Constitution (1996), Defence Act (2002), older policy of the SANDF (2009), current SANDF HIV policy (2013), Department of Health guidelines (2014) and Occupational Health and Safety Act (1993).Most of the legislation provided the manner in which the SANDF has to conduct the management of its members. The most important outcome of chapter three is that there are laws and guidelines that need to be followed by the organisation in order to care for HIV infected members in the external deployments.

Chapter four outlines the research design and methodology followed in this research which includes the semi structured questionnaires as the primary data collection method .Secondary data was collected from books, journals, news articles, and the SANDF instructions.

The primary data was generated to address the following research objectives as stipulated in chapter one.

Objective one –to determine the implication of the HIV policy on the organisation.

Objective two- to determine the implication of the HIV policy on the military health service.

Objective three- to determine the implication of the HIV policy on the HIV positives members.

The most important outcome of chapter four was that the semi structured questionnaires were lotused to the participants, although there were limitations to the method that was used to collect data .The respondents who provided most of the responses is the already deployed health care workers.

Chapter Five outlines the findings of the research conducted by semi structured questionnaires that were sent to SO1.Nursing is the discipline that responded more than other SAMHS disciplines. According to the percentage nursing was 82%.medicine 6%, oral health 3%, environmental health 3% social worker 3%, pharmacy 3% and even psychology 0%.

The most important outcome of chapter five was that majority of the respondents were nurses and that can have more impact on this research because the views of other disciplines of SAMHS might have provided different findings.

Chapter six provides the outcome of this research that includes conclusions as well as recommendations

6.3 The Conclusion of the Research

The main conclusions of the research is per objectives as outlined in chapter one are as follows:

Objective One: To assess the implication the revised HIV policy has on the organisation.

The background and rationale of this research in chapter one implies that the SANDF was propelled to deploy HIV infected member on the external missions. The SANDF had to develop a policy that will guide the process of deploying the infected members that are in line with other legislations of the country as they are outlined in chapter three. The organisation did develop that policy because the respondents did know about the policy as per findings in chapter five. The SANDF has to consider factors like involving all stakeholders in creating the policies as was outlined in chapter two. There are methods that have to be followed when formulating policies, but those methods may have barriers or facilitators.

Objective Two: To assess the implication of the policy on the SAMHS as the health care providing arm of the SANDF.

The majority of health workers are aware of the implemented HIV policy as was mentioned on the findings in chapter five. SAMHS have to give clear guidelines to health workers prior deployment on how to render health care to infected members at the mission areas. The down-up method (see chapter 2) may be used by the organisation to cover all stakeholders in all steps of policy formulation. The decision of deploying members as was mentioned in chapter one have more implication on the medication of infected members at the mission areas as was one of the findings in chapter five. As was outlined in chapter two that defence forces of other countries do not do mandatory testing to members immediately after deployment. The organisation has to look at testing of members at De Brug when they coming back from deployment.

Objective Three: To assess the implication of the HIV policy on the infected deployed members of the SANDF.

Flight delays were found to be the other contributing factor on the challenge of medication shortages at the mission areas as in chapter five. In chapter three on the DoH health guidelines the 500 or lesser CD4 count is the new baseline on starting infected members on treatment .The SANDF is to be in line with the DoH health guidelines and that means in their HIV policy that has to be reviewed. The infected members are the beneficiaries of this policy. In chapter two it was outline that in the down-up method of implementation the local stakeholders (health care workers) know the needs of the beneficiaries (patients) and need to be involved by the SANDF.

Objective four: To assess the existing data that is related to this research/HIV deployment policy.

The militaries in the world have policies for HIV management of uniformed members as was outlined in chapter two. The researchers in chapter two mentioned factors that are related to HIV in the military such as: Uniformed members are also seen as the contributing factor on contracting and infecting population with HIV, that stress level is high in the military and that has got a negative impact on the CD4 count of the infected members and that adherence can be difficult for uniform members because levels of alcohol use is usual high in the military. These factors pose a threat in the management of the HIV/AIDS in the military and this is the pandemic that really has to be managed in the world. The Sub-Sahara is seen as the biggest nest of HIV in the world in chapter two.

“The state may not unfairly discriminate directly or indirectly against anyone on one or more grounds including race, gender […] language and birth.” (The Constitution of the Republic of South Africa, ch2 s.9 ss.3, 1996).

Since SANDF is governed by rules and regulations of which the Constitution is the highest. The organisation should ensure that it operates in line with those laws and not forget other guidelines that guide day-to-day healthcare rendering to the infected members. The military community has to formulate policies on managing HIV pandemic in their organisations. These policies have to be created by following certain methods and be in line with the country’s legislations as outlined in chapter two. These DoH guidelines work inside our beloved country, but even beyond the borders where the country is represented by uniformed members.

The researcher concludes by saying that the healthcare rendering of the SANDF was considered and that the HIV policy may be either positive or negative. The reason is because some of the respondents in chapter mentioned that healthcare workers at the deployment areas face certain

challenges. The implementation of the HIV deployment policy was a great decision for the organisation. The planning and results after implementation as was outlined in chapter one made it clear that there are challenges that need to be considered by the SANDF.

The organisation should consider the healthcare rendering in the deployment areas for the HIV-infected members, especially the issuing of medication and regular blood check-ups for CD4 counts and viral loads as was discovered by the findings in chapter five. Changes were made in the new HIV deployment policy compared to the older one as outlined in chapter three because the SANDF started deploying HIV-infected members to the external areas.

The researcher can conclude that the bigger challenge is with the treatment at the deployment areas. The SANDF should come up with another standard working procedure for handling and issuing treatment at the deployment areas.

6.4 Recommendations and Further Research Opportunities

The DoH HIV guidelines state that HIV-infected members should be checked for their CD4 count, viral load and eGFR on a regularly basis. The SANDF does not have the regular check-up system at the deployment areas. The organisation should come up with the system that will ensure that HIV-infected members are being checked at the deployment areas.

The SANDF has measures in place for managing complications. The healthcare workers know these measures. This is one of the most important factors for every mission in which the SANDF is involved, especially in foreign countries.

The infected members that are on or not on treatment should be checked regularly in order to check their adherence to their treatment. The blood levels should be checked for the CD4 count, viral load and EGFR to see if they are going down or up during external deployment as is the procedure with the members inside the country. The SANDF should consider that factor and come up with a system that will work better in the deployment area setups.

The healthcare workers should give the highest quality of care to our uniformed members all the time. For the healthcare workers to give that highest quality of care to the HIV-infected members there should be guidelines that are clear. As much as each healthcare workers received formal education from tertiary institutions and were taught practices at healthcare

facilities, these guidelines are from research which should be revisited because the world changes daily. Researchers and scientists constantly discover new facts about the HIV epidemic.

The researcher conducted this qualitative research among healthcare workers based on the HIV deployment policy implemented in 2009. The participants were each given a questionnaire to complete after they were given the consent forms. The questionnaire was emailed to the healthcare workers from all nine provinces after the questionnaire was piloted in the province in which the researcher resides.

It was clear that almost all healthcare workers are aware of the HIV deployment policy that was implemented. The second important thing that was identified by the researcher was that there is a lack in the guidelines regarding the rendering of high-standard healthcare to HIV-infected members in the mission areas. Apart from better guidelines, accessibility and transparency could also help reduce the challenges. It was clear from the results that there was a demand increase for medication in the mission areas. One could argue that the medication demand increase was only for ARVs. This could be explored in future research.
The organisation might also consider consulting the people who are on the ground level, which might add views that can add value to new and reviewed policies. The SANDF also might consider reviewing their policies and employing a consulting process in the RSA.

The researcher believes that if the organisation can involve healthcare workers in the review, especially those who were already deployed, it will be beneficial to the organisation. The organisation must also put the feedback questionnaire of the HIV-infected members in the mission areas to be completed by deployed healthcare workers after deployment as part of demobilisation.

The researcher believes that the SANDF should go back and sit down with the entire service core and plan how to support deployed members. The organisation should consider the available postal services in the countries where the members are deployed, especially if there will be flight delays. The researcher believes that the organisation should consider how the ARVs are kept in the mission areas. Each patient should have enough medication that will be flown out with the medical personnel in the beginning of the deployment. The researcher believes that the HIV-positive members should be followed-up even in the mission areas

because it will be very difficult to detect deterioration of the members. One of the reasons for the follow-up, which was mentioned in chapter two, was to check for early detection of opportunistic infections (OIs).

The researcher believes that the organisation should consult with all healthcare workers and plan how to support infected members in the mission areas. Furthermore, SAMHS should consider that there might be a system that could work better in deployment areas. The researcher can agree with the one of the respondent that even if the infected members on treatment can take enough treatment stock with them, they should be monitored by healthcare workers at the three-monthly intervals and should be tested every six months.

The researcher believes that there is a lot of the research that can still be done by the SANDF as an organization about this HIV deployment policy. This will help the organisation to evaluate the policy and review it. The data that the researcher used to determine the findings was obtained mostly from one discipline of SAMHS in comparison with other disciplines. The researcher also believes that the healthcare workers are not fully aware of it, so it is the researcher's opinion that the healthcare workers should be involved in the planning of new policies that involve them.

The researcher is of the opinion that the HIV-infected members do get tested for their CD4 counts and viral loads when they land back at De Brug as part of demobilisation activities. However, it could be seen by some as a form of discrimination and the organisation could be taken to court again. It will also assist in evaluating the feasibility of deploying for 12 months as compared to six months. The researcher believes that the SANDF must add to the HIV deployment policy or create guidelines on how to care for HIV-infected members in the mission area, which is not a normal setting like inside the country.

6.5 Summary

The researcher will conclude by saying that the implementation of the HIV deployment policy did have impact on giving care to the uniformed members in the mission areas. The HIV-infected members are the ones that are on the receiving end. The planning and execution might be the most important things that alleviate the challenges and not the policy itself.
The organisation should start implementing structured guidelines for monitoring HIV-infected members in the mission areas. The organisation should check the flight log to the mission areas.

The other solution that was suggested by the participants is that members should leave with enough medication for the period of deployment, but that they should be monitored. The researcher might suggest that at three- or six-month intervals occupational or preventative healthcare workers can take medication issues for each and every HIV-infected members in the mission areas. One might argue that funding might be a challenge for the organisation, but this challenge, like the others, should be eliminated.

The organisation should provide healthcare of high standard to our uniformed members who are ensuring that they fly the RSA flag high beyond the borders.

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Appendices

The evaluation on the impact of the revised HIV deployment policy on the health care service of the South African National Defence Force

Thesis Questionnaire

APRIL 1, 2016
BY 00006155PF CAPT B.L NXUMALO
AMHU FS

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STELLENBOSCH UNIVERSITY
CONSENT TO PARTICIPATE IN RESEARCH

An evaluation of the implication of the revised HIV deployment policy on the health care service of the South African National Defence Force

You are asked to participate in a research study conducted by Lt Busisiwe Letty Nxumalo, 4 years Nursing Diploma, Primary Health Care Diploma, and Honors in Public Administration, from the School of Public Leadership (SPL) at Stellenbosch University. I am currently doing Masters in Public Administration (MPA) the results of the questionnaire will be contributed to thesis or dissertation. You were selected as a possible participant in this study because it was seen that more information can be obtained from the OCs, SO1s on what is happening on the ground with the health care system of the SANDF since the 2009 implementation of the HIV/AIDS deployment policy. .

1. **PURPOSE OF THE STUDY**

The purpose of the study is to evaluate the implication of the policy on health obligation of the SANDF towards the infected individual, from the period of implementation until current.

2. **PROCEDURES**

If you volunteer to participate in this study, we would ask you to do the following things:

Receiving the questionnaire on the lotus note

Please fill the questionnaire after signing the consent form

Consent form

Read and sign the consent and make a copy of the signed consent. .

Filling up of the questioner

Answer the questions by choosing the most likely answer or the answer that reflect on what is happening on the ground (pre-deployment. Mission areas and post deployment)

Lotus back the filled questioner

The questionnaire is confidential after being filled and to be lotus back with the signed consent form.

Feedback on the research

RESTRICTED

Defence Intelligence
Department:
Defence
REPUBLIC OF SOUTH AFRICA

Telephone: (012) 315-0216
Fax: (012) 326-3246
Enquiries: Brig Gen M. Sizani

DI/DDS/R/202/3/7

Defence Intelligence
Private Bag X367
Pretoria
0001

July 2015

AUTHORITY TO CONDUCT RESEARCH IN THE DEPARTMENT OF DEFENCE (DOD): LT B.L. NXUMALO

1. Request letter DI/R/00006155/1 dd 24 April 2015 has reference.

2. Permission is hereby granted from a security perspective to Lt B.L.Nxumalo to conduct research in the DOD on the topic entitled **"An Evaluation of the Implication of the Revised HIV Deployment Policy on the Health Care Services of the South African National Defence Force (SANDF)"** as a prerequisite for an attainment of a Masters Degree in Public Administration with the University of Stellenbosch as requested.

3. On completion the final research product must be submitted to Defence Intelligence (DI), Sub-Division Counter Intelligence (SDCI) for security scrutiny before it is released to any entity outside the DOD.

4. For your attention.

(G.S. SIZANI)
CHIEF DIRECTOR COUNTER INTELLIGENCE: MAJ GEN
KS/KS (Lt B.L. Nxumalo)

DSTR

For Action

OC Area Military Health Unit Free State

Internal (Attention: Lt B.L. Nxumalo)

File: DI/DDS/202/3/7

Lefapha la Bolphomolo Umnyango wezoKuVikela Kgoro ya Tshireletso iSebe lezoKhuselo Departement of Defence Muhasho wa Tshireletso
LimNyango weseKuVikela Ndzawulo ya swa Vss rezheleri Lefapha la Tshireletso Departement van Verdediging LiTiko leTekewikela

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sa military health service

Department:
Defence
REPUBLIC OF SOUTH AFRICA

AMHF HQ/R/00008155PF

Telephone :012-671-5338
Facsimile :012-671-5352
Enquiries :Col B. J Dube
Email :bjdube44@hotmail.com

Headquarters
Area Military Health Formation
Private Bag X102
Lilliclon
0140
23 August 2016

AUTHORITY TO COLLECT DATA FOR RESEARCH IN THE SAMHS: AREA MH FMN

1. The abovementioned has reference.

2. Capt B.L Nxumalo from Area MH Unit FS has been granted authority to conduct research by the Defence Intelligence and the SC of the SAMHS after the matter was recommended by both the Unit Acting OC and the GOC Area Mh FMN.

3. The member was granted the authority to evaluate the impact of the revised HIV deployment policy on the health care service of the South African National Defence Force and have key amongst others identified SO1 Nurses and OHS Nurses as the key informants.

4. SSO Nurse Area MH FMN take note that participation in this research is on voluntary bases however encourage SO1 Nurses (PHC and OHS) and those in acting capacity to support the member as the results of the research will increase scientific knowledge base from which the organization as well as nursing can benefit if implemented.

Lt Col

(B.J. DUBE)
SSO NURSE AREA MH FMN HQ: COL

REMARKS BY GOC AREA MH FMN

Approved/Not Approved

(D.TEMPELHOFF)
GENERAL OFFICER COMMANDING AREA MH FMN HQ: BRIG GEN

DISTR

For Action

Med List Alpha

RESTRICTED

Defence intelligence
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DI/DDS/R/202/3/7

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November 2016

AUTHORITY TO PUBLISH A DISSERTATION IN PARTIAL FULFILMENT OF THE REQIREMENTS FOR THE MASTERS DEGREE IN PUBLIC ADMINISTRATION: CAPT B.L. NXUMALO

1. Receipt of a letter DI/R/00006155/02 with a Dissertation dd 01 November 2016 and a conversation between Capt B.L. Nxumalo of Area Military Health Unit Free State and WO1 K. Skweyiya of the Defence Intelligence (DI) on the 10 November 2016 is acknowledged.

2. Approval is hereby granted from a security perspective to Capt B.L. Nxumalo to publish a Dissertation on the topic entitled **"The Evaluation of the Implication of the Revised HIV Deployment Policy on the Health Care Service of the South African National Defence (SANDF)"** under the tutelage of the University of Stellenborch as per request.

3. For your attention.

(G.S. SIZANI)
CHIEF DIRECTOR COUNTER INTELLIGENCE: MAJ GEN
KS/KS (Capt B.L. Nxumalo)

DISTR

For Action

OC Area Military Health Unit FS (Attention: Capt B.L. Nxumalo)

Internal

File: DI/DDS/R/202/3/7

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The questionnaire is confidential after being filled and to be lotus back with the signed consent form.

Feedback on the research

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0001

July 2015

AUTHORITY TO CONDUCT RESEARCH IN THE DEPARTMENT OF DEFENCE (DOD): LT B.L. NXUMALO

1. Request letter DI/R/00006155/1 dd 24 April 2015 has reference.

2. Permission is hereby granted from a security perspective to Lt B.L.Nxumalo to conduct research in the DOD on the topic entitled **"An Evaluation of the Implication of the Revised HIV Deployment Policy on the Health Care Services of the South African National Defence Force (SANDF)"** as a prerequisite for an attainment of a Masters Degree in Public Administration with the University of Stellenbosch as requested.

3. On completion the final research product must be submitted to Defence Intelligence (DI), Sub-Division Counter Intelligence (SDCD Sn) for security scrutiny before it is released to any entity outside the DOD.

4. For your attention.

(G.S. SIZANI)
CHIEF DIRECTOR COUNTER INTELLIGENCE: MAJ GEN
KS/KS (Lt B.L. Nxumalo)

DSTR

For Action

OC Area Military Health Unit Free State

International (Attention: Lt B.L. Nxumalo)

File: DI/DDS/202/3/7

Lefapha la Boiphemelo . Umnyango wezokuVikela Kgoro ya Tshireletso . iSebe leaEkuseko Department of Defence Mmasepho wa Tsireletso
UmNyango wezoku Vikela Ndzawulo ya swa Vutshilo Lefapha la Tshireletso . Departement van Verdediging . Litiko leTekuvikela

RESTRICTED